MICHIGAN DEPARTMENT OF NATURAL RESOURCES

In the Matter of:

STATE DISPOSAL LANDFILL/PLAINFIELD TOWNSHIP WELLS

Plainfield Township, Kent County, Michigan,

MDNR Docket No.: AOC-ERD-94-012

Proceeding Under Section 10f and 14b(1) of the Michigan Environmental Response Act, Act 307 of 1982, as amended, MCL 299.610f and 299.614b(1).



ADMINISTRATIVE ORDER BY CONSENT FOR RESPONSE ACTIVITY

I. JURISDICTION

This Administrative Order by Consent ("Order") is entered into voluntarily by and between the Michigan Department of Natural Resources ("MDNR"), Frank J. Kelley, Attorney General for the State of Michigan, and SC Holdings, Inc., ("SC Holdings"), a subsidiary of Waste Management of North America, Inc. ("Waste Management"), pursuant to the authority vested in the MDNR by Sections 10f and 14b(1) of the Michigan Environmental Response Act of 1982 ("MERA" or "Act 307"), as amended, 1982 PA 307, MCL 299.610f and 299.614b(1). The Order concerns the performance by SC Holdings of certain response activities at the State Disposal Landfill/Plainfield Township Wells Superfund Site in Kent County, Michigan (hereinafter the "Facility" or

"Site"). MDNR has been designated the lead agency for this Site pursuant to the Comprehensive Environmental Response,

Compensation, and Liability Act (CERCLA), 42 U.S.C. 9601 et seq,
in the Superfund Memorandum of Agreement between the United

States Environmental Protection Agency (U.S. EPA) and MDNR dated

December 26, 1989.

II. DENIAL OF LIABILITY

The execution of this Order by SC Holdings is neither an admission of liability with respect to any issue dealt with in this Order nor is it an admission of any factual allegations or legal conclusions stated or implied herein.

III. PARTIES BOUND

3.1 This Order shall apply to and be binding upon SC Holdings and its successors and assigns. No change in ownership or corporate status shall in any way alter SC Holdings' responsibilities under this Order. Waste Management shall provide the MDNR with written notice prior to the transfer of ownership of part or all of the Facility, and shall provide a copy of this Order to any subsequent owners or successors before ownership rights are transferred. SC Holdings shall comply with the requirements of Section 10c of MERA, MCL 299.610c. SC Holdings shall provide a copy of this Order to all contractors, subcontractors, laboratories, and consultants retained to conduct

any portion of the work performed pursuant to this Order within three (3) calendar days of the effective date of such retention. Notwithstanding the terms of any such contract, SC Holdings is responsible for compliance with the terms of this Order, and shall ensure that such contractors, subcontractors, laboratories, and consultants perform all work in conformance with the terms and conditions of this Order.

3.2 The signatories to this Order certify that they are authorized to execute and legally bind the parties they represent.

IV. STATEMENT OF PURPOSE

4.1 In entering into this Order, it is the mutual intent of the Parties to expedite effective response activity to

(a) determine the nature and extent of contamination and any threat to the public health, safety, or welfare, or the environment caused by the release or threatened release of hazardous substances, pollutants or contaminants from the site by (completing) a remedial investigation which was initiated in 1989, (b) determine and evaluate alternatives for remedial action to prevent, mitigate, abate or otherwise respond to or remedy any release or threatened release of hazardous substances, pollutants, or contaminants from the Site by conducting a feasibility study, and (c) to minimize litigation.

V. FINDINGS OF FACT

- 5.1 State Disposal Landfill is located at 3954 East
 Beltline Ave. (M-44), approximately 6 miles northeast of the City
 of Grand Rapids, Michigan. The MDNR has determined that
 contamination from the landfill has impacted the water supply
 wells for Plainfield Township. The Plainfield Township wells are
 located 2 miles to the north of State Disposal Landfill between
 the Grand River and Grand River Drive.
- 5.2 The landfill was a licensed waste disposal facility from 1966 until 1976. During this time the landfill accepted residential, commercial and other wastes. The landfill is owned by SC Holdings, Inc., a subsidiary of Waste Management.
- 5.3 In 1986 hydrogeologic studies indicated groundwater contamination in the immediate vicinity of the landfill.

 Volatile organic compounds (VOCs) including, but not limited to, tetrachloroethene, trichloroethene, dichloroethane, vinyl

chloride, 1,1,1-trichloroethane, 1,2-dichloroethane,
1,1-dichloroethane, chloroethane and chlorofluorcarbons were
confirmed to be present in the groundwater.

- 5.4 The MDNR has found that residential wells and the Plainfield Township wellfield were impacted by the contaminated groundwater emanating from State Disposal Landfill. Affected homes have been provided with alternative water supplies. Plainfield Township has taken temporary measures to protect the wellfield and entered into a Cost Sharing Agreement with SC Holdings, Inc. which is attached to this Order as Appendix A.
- 5.5 In February of 1990, the State Disposal Landfill was placed on the National Priorities List. The Plainfield Township Wells are a portion of the site due to MDNR's determination that the contamination from the State Disposal Landfill has migrated to the Plainfield Township Wells.
- 5.6 Since November 1989, SC Holdings has been conducting an RI/FS at the State Disposal Site in a phased approach.

VI. DETERMINATIONS

- 6.1 On the basis of the Findings of Fact, the MDNR makes the following determinations:
- (a) The State Disposal Landfill/Plainfield Township Wells Facility is a "Facility" as that term is defined in Section 3(m) of MERA, MCL 299.603(m).
- (b) SC Holdings is a "person" as that term is defined in Section 3(w) of MERA, MCL 299.603(w).
- (c) "Hazardous substances" as that term is defined in Section 3(p) of MERA, MCL 299.603(p), were found at the Facility.
- (d) Groundwater contamination constitutes an actual or threatened "release" within the meaning of Sections 3(x) and 3(ff) of MERA, MCL 299.603(x) and MCL 299.603(ff).
- (e) The actual or threatened releases of hazardous substances at or from the Facility may pose an imminent and substantial endangerment to the public health, safety, welfare, or the environment within the meaning of Section 10f of MERA, MCL 299.610f.

- (f) In order to protect public health, safety, welfare, and the environment, and to abate the danger or threat, it is necessary and appropriate that response activity be taken. The response activity consists of the performance of the work specified in the Statement of Work (SOW) attached as Appendix B.
- (g) SC Holdings is a person that may be liable within the meaning of Sections 10f and 12(1) of MERA, MCL 299.610f and MCL 299.612(1).
- 6.2 On the basis of the finding of facts, the MDNR and the Attorney General make the following determinations:
- (a) SC Holdings will properly implement the response activities required by this Order.
- (b) This Consent Order is in the public interest, will expedite effective response activity, and will minimize litigation.

BASED ON THE FOREGOING FACTS AND DETERMINATIONS, THE MDNR, THE ATTORNEY GENERAL, AND SC HOLDINGS HEREBY AGREE, AND IT IS HEREBY ORDERED THAT:

VII. IMPLEMENTATION

Within thirty (30) days of the effective date of this Order, SC Holdings shall submit a revised work plan for conducting Phase III Remedial Investigation (RI), a Quality Assurance Project Plan, Health and Safety Plan, Field Sampling Plan, and other necessary plans developed in accordance with the SOW, attached as Appendix B, and applicable quidance documents provided by the MDNR. SC Holdings shall implement the work detailed in the Work Plan upon approval of each plan pursuant to the procedures provided for in this Order. As approved, each component of the Work Plan, and approved modifications thereto, shall be deemed incorporated into this Order and made an enforceable part of this Order. All work shall be conducted in accordance with Act 307, the 307 Rules (Michigan Administrative Code ("MAC") R 299.5101 et seq); the Comprehensive Environmental Response, Compensation, and Liability Act ("CERCLA"); the National Contingency Plan ("NCP"), 40 CFR 300.1 et seq; and any amendments thereto, and the requirements of this Order, including any standards, specifications, and schedules contained in the Phase III RI.

- (a) The Phase III RI shall, at a minimum, describe the Facility history and characteristics and provide a detailed description of the tasks to be conducted during the response activity, including methodology, specifications, and schedules. The Phase III RI shall be developed and conducted consistent with Act 307, the 307 Rules (Michigan Administrative Code ("MAC") R 299.5101 et seq); the CERCLA; the NCP; and any amendments thereto, and the requirements of this Order, including any standards, specifications, and schedules contained in the Phase III RI.
- (b) The Quality Assurance Project Plan ("QAPP") shall, at a minimum, describe the quality control, quality assurance, sampling protocol, and chain of custody procedures that shall be implemented in carrying out the tasks required by this Order. The QAPP shall be developed in accordance with the U.S. EPA's "Interim Guidelines and Specifications for Preparing Quality Assurance Project Plans" QAMS-005/80, EPA-600/4-83-004; NTIS PB 83-170514; and the MDNR QAPP Guidance dated November 29, 1990.
- (c) SC Holdings shall submit a Health and Safety Plan to the MDNR which shall not be subject to MDNR approval as provided in Section XVIII. The Health and Safety Plan shall, at a minimum, assign Facility safety and security responsibilities to all on-site personnel, establish personnel safety and protection standards, establish mandatory safety operating

procedures for physical and chemical hazards that may be encountered at the Facility, demarcate and classify various zones of contamination, establish decontamination procedures, and provide for contingencies that may arise during the course of the implementation of this Order. The Health and Safety Plan shall be developed in accordance with the standards promulgated pursuant to Section 126 of the Comprehensive Environmental Response, Compensation, and Liability Act ("CERCLA"), 42 USC §9621, Section 6 of the Occupational Health and Safety Act of 1970, and the Michigan Occupational Safety and Health Act.

7.2 SC Holdings shall deliver to the MDNR for approval the following submittals or commence or complete the following actions, as appropriate, in accordance with the following time schedules:

SCHEDULE

Submit Draft Phase III RI/FS Work Plan, including QAPP, Health & Safety Plan,	Within 30 days after entry of this Order
and Field Sampling Plan Submit Draft Risk Assessment	60 days after entry of Order
Submit Final Phase III RI/FS Work Plan	30 days after MDNR comments on the Draft Phase III Work Plan
Implement Final Phase III RI/FS Work Plan	30 days after MDNR approves the Final Phase III Work Plan
Submit Draft Phase III RI Report	In accordance with the approved Phase III RI Work Plan
Submit Final Phase II Report	30 days after entry of Order
Submit Final Phase III Report	30 days after MDNR comments on the Draft Phase III RI Report are issued
Submit Revised Risk Assessment	30 days after MDNR approval of final Phase III report
Submit Final Risk Assessment	30 days after receipt of MDNR comments to revised risk assessment
Submit Draft FS Report	90 days after MDNR approves the Final Phase II and Phase III Report
Submit Final FS Report	30 days after MDNR comments on the Draft FS Report are issued

7.3 The parties acknowledge and agree that this Order does not constitute a warranty or representation of any kind by the MDNR that the work performed in accordance herein will result in the achievement of the remedial criteria as established by law.

7.4 SC Holdings shall submit to the MDNR a complete written description of the activities conducted pursuant to this Section as part of any submission, report, plan, or other document required under the terms of this Order. Such description shall include, but not be limited to, an overview of the work conducted, a complete description of the methodologies employed, and documentation and analysis of data collected pursuant to this Order and the subject submission, report, plan, or other document.

VIII. ADDITIONAL RESPONSE ACTIVITY

8.1 As used in this Section, "Additional Response Activity" shall mean all activities not specifically set forth in the approved Phase II and Phase III RI/FS that the MDNR determines are necessary to meet the Performance and Cleanup Standards described in the administrative rules pursuant to MERA, MAC R 299.5101 et seq, and all applicable state and federal requirements, that do not fundamentally change the overall remedial approach outlined in the approved remedial investigation, SOW, and Work Plan. These activities may include modifications to the components of the remedial investigation and to the type and cost of materials, equipment, facilities, services, and supplies used to implement the remedial investigation.

- 8.2 In the event that the MDNR determines that additional response activity is necessary, notifications of such additional response activity will be provided to SC Holdings project coordinator. SC Holdings may also propose additional response activity which shall be subject to approval by the MDNR. Any additional response activity determined to be necessary by the MDNR, or otherwise agreed to by the parties, shall be completed by SC Holdings in accordance with the standards, specifications, and schedules approved by the MDNR.
- 8.3 Unless the MDNR agrees to extend the time period, within thirty (30) days of receipt of notice from the MDNR that additional response activity is necessary, or from the date on which the parties otherwise agree that additional response activity is necessary, SC Holdings shall submit a plan for the additional response activity to the MDNR for approval. The plan shall be developed in conformance with the requirements of this Order. If not otherwise submitted, the plan shall also include an estimate of the additional costs for the additional response activity in accordance with paragraph 9.3. Upon approval, the plan shall be incorporated herein and made an enforceable part of this Order. SC Holdings shall implement the plan for additional response activity in accordance with the schedule contained therein.

8.4 Nothing in the preceding paragraph shall limit the power and authority of the MDNR, the Attorney General, or a court to take, direct, or order all appropriate action to protect public health, welfare, and safety, or the environment, or to prevent, abate, or minimize an actual or threatened release of contaminants.

IX. FINANCIAL ASSURANCE

- 9.1 SC Holdings has provided financial assurance of its ability to fund the response activities set forth in this Order and to reimburse the State of Michigan's response and oversight costs by providing the corporate bond included as Appendix C, as of the effective date of this Order.
- 9.2 SC Holdings may propose a financial assurance mechanism other than the corporate bond, subject to the review and approval of the MDNR. Such financial assurance mechanism shall be in an amount equal to the estimated cost of response activities to be performed pursuant to this Order, plus the State of Michigan's response and oversight costs.
- 9.3 If at any time SC Holdings is unable to provide the corporate bond as included in Appendix C, Waste Management shall provide an alternate financial assurance mechanism within sixty (60) days. SC Holdings shall provide one of the following financial assurance mechanisms to the MDNR: a) Letter of Credit;

- b) Environmental Escrow; c) Certificate of Deposit, in an amount equal to the estimated costs of response activities to be performed pursuant to this Order plus the State of Michigan's response and oversight costs. SC Holdings shall choose the alternate financial assurance mechanism to be provided, subject to the review and approval of the MDNR.
- 9.4 SC Holdings shall establish and fund a Dispute Resolution Escrow (Appendix D). During the pendency of any dispute concerning the reimbursement of costs or the payment of stipulated penalties, SC Holdings shall pay that portion of a demand, with any applicable interest, that is subject to a good faith dispute into the Dispute Resolution Escrow. The Dispute Resolution Escrow shall be used solely and exclusively to hold funds which are the subject of a dispute resolution pursuant to Section XXIV. Following completion of the dispute resolution process, the funds shall be disbursed to the prevailing party in accordance with the Escrow Agreement. The Escrow Agent shall be selected by SC Holdings subject to the approval of the MDNR. the event SC Holdings is placed under Chapter 7 or 11 of the United States Bankruptcy Code, voluntarily or involuntarily, its rights, claims or interests in the Dispute Resolution Escrow will be immediately vested in the State alone.
- 9.5 The Escrow Agreement shall provide that the Escrow Agent shall keep all records of the Dispute Resolution Escrow on a calendar year basis. The escrow Agent shall make an annual

accounting to the Parties within ninety (90) days after the close of each calendar year or portion thereof during which the Dispute Resolution Escrow is effective.

X. ENGAGEMENT OF A CONTRACTOR

Within fifteen (15) days of the effective date of this Order, SC Holdings shall retain a qualified and experienced contractor for the purpose of performing the work required by this Order. All work performed by said contractor pursuant to this Order shall be under the general direction and supervision of a qualified individual with direct experience and expertise in the investigation and cleanup of sites of environmental contamination. SC Holdings contractor shall also employ project personnel who shall have direct experience in the investigation and cleanup of sites of environmental contamination. A copy of SC Holdings' contract, including a statement of qualifications and identification of personnel designated for the project, shall be provided to the MDNR within fifteen (15) days of the effective date of this Order. SC Holdings shall notify the MDNR regarding the identity and qualifications of all contractors and subcontractors as soon as each contractor or subcontractor is engaged or at least two (2) weeks prior to the subcontractor's commencement of Facility work, whichever occurs first. shall have the right to disapprove, within ten (10) days of notification of a contractor, subcontractor, or project personnel, based on professional qualifications, conflicts of

interest, and/or deficiencies in previous similar work, any such contractor, subcontractor, or project personnel. If the MDNR disapproves any such person(s), the MDNR will provide SC Holdings written notice thereof, and SC Holdings shall have thirty (30) days to identify any replacement(s).

XI. QUALITY ASSURANCE/SAMPLING

- 11.1 SC Holdings shall assure that the MDNR and its authorized representatives are allowed access to any laboratory utilized by SC Holdings in implementing this Order for quality assurance monitoring.
- 11.2 SC Holdings shall submit to the MDNR the results of all sampling or tests and all other data generated by SC Holdings or its contractor(s), or on SC Holdings' behalf, in the course of implementing this Order upon receipt of such information by SC Holdings.
- 11.3 At the request of the MDNR, SC Holdings shall allow the MDNR or its authorized representatives to take split and/or duplicate samples of any samples collected by SC Holdings pursuant to the implementation of this Order. Except as may be necessary for sampling required pursuant to Section XIV, SC Holdings shall notify the MDNR not less than fourteen (14) days

in advance of any sample collection activity. In addition, the MDNR shall have the right to take any additional samples that it deems necessary.

11.4 Notwithstanding any provision of this Order, the MDNR and the Attorney General shall retain all of their information gathering, inspection, and enforcement authorities and rights under Act 307 and any other applicable statute or regulation.

XII. PROJECT COORDINATORS

of this Order, SC Holdings shall designate a project coordinator who shall have primary responsibility for implementation of the work at the Facility. The MDNR's project coordinator shall be Ms. Lisa Summerfield, Environmental Response Division, MDNR. The MDNR's project coordinator will be the primary designated representative for the MDNR at the Facility. All communication between the parties and all documents, reports, approvals, and other submissions and correspondence concerning the activities performed pursuant to the terms and conditions of this Order shall be directed through the project coordinators. If any party decides to change its designated project coordinator, the name, address, and telephone number of the successor shall be provided, in writing, to the other party seven (7) days prior to the date

on which the change is to be effective. This paragraph does not relieve SC Holdings from other reporting obligations under the law.

12.2 The MDNR may designate other authorized representatives, employees, contractors, and consultants to observe and monitor the progress of any activity undertaken pursuant to this Order.

XIII. ACCESS

- 13.1 To the extent access to the Facility is owned, controlled by, or available to SC Holdings from the effective date of this Order, the MDNR, its authorized employees, agents, representatives, contractors, and consultants, upon presentation of proper credentials, shall have access at all reasonable times to the Facility and any property to which access is required for the implementation of this Order, including, but not limited to:
- (a) Monitoring the work or any other activities taking place pursuant to this Order on the Facility;
- (b) Verifying any data or information submitted to the MDNR;

- (c) Conducting investigations relating to contamination at or near the Facility;
 - (d) Obtaining samples;
- (e) Assessing the need for or planning and implementing response actions at or near the Facility; and
- (f) Inspecting and copying nonprivileged records, operating logs, contracts, or other documents.
- where the work is to be performed by SC Holdings under this Order is owned or controlled by persons other than SC Holdings, SC Holdings shall use its best efforts to secure from such persons access for the parties and their authorized employees, agents, representatives, contractors, and consultants. SC Holdings shall provide the MDNR with a copy of each access agreement secured pursuant to this Section. For purposes of this paragraph, "best effort" includes, but is not limited to, reasonable compensation to the owner to secure such access or taking judicial action to secure such access. If, after using best efforts, SC Holdings is unable to obtain access within forty-five (45) days of the effective date of this Order, SC Holdings shall promptly notify the MDNR. The State may thereafter assist SC Holdings in obtaining access. SC Holdings shall, within thirty (30) days of

receipt of a written request from the MDNR, reimburse the State for all costs not inconsistent with law incurred by the State in obtaining access in the manner provided by Section XXV.

- 13.3 All parties granted access to the Facility pursuant to this Order shall comply with all applicable health and safety laws and regulations.
- 13.4 Notwithstanding any provision of this Order, the MDNR and the Attorney General shall retain all of this inspection and access authorities under any applicable statute or regulation.

XIV. CREATION OF DANGER

occurrence of any event during performance of Response Activities conducted pursuant to this Order that causes or threatens a release of a hazardous substance from the Facility or that may present an imminent and substantial endangerment to on-site personnel or to the public health, safety, welfare, or the environment, SC Holdings shall immediately undertake all appropriate action to prevent, abate, or minimize such release or endangerment and shall immediately notify the MDNR's project coordinator or, in the event of his or her unavailability, shall notify the Pollution Emergency Alerting System (PEAS, 1-800-292-4706). In such an event, any action undertaken by SC

Holdings shall be in accordance with all applicable health and safety laws and regulations, and with the provisions of the Health and Safety Plan. SC Holdings shall submit a written report setting forth the events that occurred and the measures taken and to be taken to mitigate any release or endangerment caused or threatened by the incident and to prevent recurrence of such an incident. Regardless of whether SC Holdings notifies the MDNR under this subsection, if Response Activities undertaken under this Order cause or threaten a release or may present an imminent and substantial endangerment to on-site personnel or to public health, safety, welfare, or to the environment, the MDNR may: (a) require SC Holdings to stop Response Activities at the Facility for such period of time as may be needed to prevent or abate any such release, threat, or endangerment; (b) require SC Holdings to undertake any such activities that the MDNR determines are necessary to prevent or abate any such release, threat, or endangerment; and/or (c) undertake any actions that the MDNR determines are necessary to prevent or abate such release, threat, or endangerment. In the event that the MDNR undertakes any action to abate such a release, threat, or endangerment, SC Holdings shall reimburse the MDNR for all costs incurred by the MDNR that are not inconsistent with law. of such costs shall be made in the manner provided in Section XXV.

14.2 Nothing in the preceding subsection shall limit the power and authority of the MDNR, the State of Michigan, or this Court to take, direct, or order all appropriate action to protect the public health, welfare, and safety, or the environment, or to prevent, abate, or minimize an actual or threatened release of hazardous substances, pollutants, or contaminants on, at, or from the Facility.

XV. COMPLIANCE WITH OTHER LAWS

Order shall be undertaken in accordance with the requirements of all applicable or relevant and appropriate state and federal laws and regulations, including Act 307, the Act 307 Rules, CERCLA, the NCP, and laws relating to occupational safety and health, and other state environmental laws. In the event that there is a conflict in the application of federal or state laws or regulations, the more stringent of the conflicting provisions shall apply. Other agencies may also be called upon to review the conduct of work under this Order. Further, SC Holdings must designate, in a report to the MDNR, any facilities that SC Holdings proposes to use for the off-site transfer, storage, treatment, or disposal of any waste material.

XVI. RECORD RETENTION/ACCESS TO INFORMATION

and contractors shall preserve and retain, during the pendency of this Order and for a period of ten (10) years after its termination, all records, sampling or test results, charts, and other documents relating to historical hazardous substance disposal, treatment or handling activities at the Facility or that are maintained or generated pursuant to any requirement of this Order. After the ten (10) year period of document retention, SC Holdings and its successors shall request in writing the MDNR's written permission to destroy such documents. The MDNR shall either grant such request, or require that SC Holdings and/or their successors relinquish custody of all such documents to the MDNR. SC Holdings request shall be accompanied by a copy of this Order and sent to the following address:

Chief
Environmental Response Division
Michigan Department of Natural Resources
P.O. Box 30028
Lansing, MI 48909

Documents retained pursuant to this subsection shall not be destroyed without the prior written permission of the MDNR.

MDNR copies of all documents and information within its possession, or within the possession or control of its employees, contractors, agents, or representatives relating to the work at

the Facility or to the implementation of this Order, including, but not limited to, sampling, analysis, chain of custody records, manifests, trucking logs, receipts, reports, sample traffic routing, correspondence, or other documents or information related to the work. SC Holdings shall also, upon request, make available to the MDNR, upon reasonable notice, SC Holdings employees, contractors, agents, or representatives with knowledge of relevant facts concerning the performance of the work.

16.3 SC Holdings may assert a confidentiality or privilege claim, if appropriate, covering all or part of the information requested by this Order. Such an assertion shall be adequately substantiated when it is made. If no such claim accompanies the information when it is submitted to the MDNR, it may be made available to the public by the MDNR without further notice to Waste Management. Analytical data shall not be claimed as confidential or privileged by SC Holdings.

XVII. NOTICES

17.1 Whenever, under the terms of this Order, notice is required to be given or a report, sampling data, analysis, or other document is required to be forwarded by one party to the

other, such correspondence shall be directed to the following individuals at the specified addresses or at such other address as may subsequently be designated in writing:

As to MDNR:

Lisa Summerfield
Project Coordinator
Environmental Response Division
Telephone: (517) 335-3388
Fax: (517) 335-4887

Regular Mail: P.O. Box 30028 Lansing, MI 48909

Via Courier: 301 S. Capitol Avenue Lansing, MI 48933 As to Waste Management:

Mr. Phil Mazor
Waste Management, Inc.,
Autumn Hill Recycling
and Disposal Facility
Telephone: (616) 688-5777
Fax: (616) 688-5781

Regular Mail: 700 56th Avenue Zeeland, MI 49464

Via Courier: 700 56th Avenue Zeeland, MI 49464

XVIII. SUBMISSIONS AND APPROVALS

("submissions") identified in the SOW, Phase II RI and Phase III RI/FS shall be delivered to the MDNR in accordance with the schedule set forth in this Order and the SOW. Prior to receipt of MDNR approval, any report submitted under this Order to the MDNR for approval shall be marked "Draft" and shall include, in a prominent location in the document, the following disclaimer: "Disclaimer: This document is a DRAFT document which has not received final acceptance from the Michigan Department of Natural Resources ("MDNR") and has been prepared by SC Holdings pursuant

to a government Administrative Order. The opinions, findings, and conclusions expressed are those of the authors and not those of the MDNR."

- 18.2 Upon receipt of any plan, report, or other item relating to the work that is required to be submitted for approval pursuant to this Order, the MDNR project coordinator will in writing: (a) approve the submission; (b) disapprove the submission, notifying SC Holdings of deficiencies; or (c) approve the submission with modifications. Upon receipt of a notice of approval or modification from the MDNR, SC Holdings shall proceed to take any action required by the plan, report, or other item as approved or as modified, and shall submit a new cover page and the modified pages of the plan marked "Final."
- 18.3 Notice of any disapproval will specify the reason(s) for the disapproval. Unless a notice of disapproval specifies a longer time period, upon receipt of a notice of disapproval from the MDNR, SC Holdings shall, within thirty (30) days thereafter, correct the deficiencies and resubmit the plan, report, or other item for approval. Notwithstanding a notice of disapproval, SC Holdings shall proceed to implement other actions under this Order not directly related to the deficient portion of

the submission. If, upon resubmission, the plan, report, or other item is not approved, the MDNR shall so advise SC Holdings and SC Holdings shall be deemed to be in violation of this Order.

- 18.4 A finding of approval or approval with modifications shall not be construed to mean that the MDNR concurs with all conclusions, methods, or statements in the submissions or warrants that the submission comports with law.
- 18.5 No informal advice, guidance, suggestions, or comments by the MDNR regarding reports, plans, specifications, schedules, or any other writing submitted by SC Holdings shall be construed as relieving SC Holdings of its obligation to obtain such formal approval as may be required by this Order.

XIX. PROGRESS REPORTS

19.1 SC Holdings shall provide to the MDNR written quarterly progress reports relating to response action that shall: (a) describe the actions that have been taken toward achieving compliance with this Order during the previous quarter; (b) describe data collection and activities scheduled for the next quarter; and (c) include all results of sampling and tests and other data received by SC Holdings its employees or authorized representatives during the previous quarter relating to the response activities performed pursuant to this Order. The first quarterly report shall be submitted to the MDNR within

90 days following the effective date of this Order and Quarterly thereafter until the issuance of the Certificate of Completion as provided in Section XXIX.

XX. INDEMNIFICATION AND INSURANCE

- 20.1 SC Holdings shall indemnify and save and hold harmless the State of Michigan and its departments, agencies, officials, agents, employees, contractors, and representatives for any and all claims or causes of action arising from or on account of acts or omissions of SC Holdings its officers, employees, agents, or any persons acting on its behalf or under its control in carrying out response actions pursuant to this Order. Neither the State of Michigan nor any of its departments, agencies, officials, agents, employees, contractors, or representatives shall be held out as a party to any contract entered into by or on behalf of SC Holdings in carrying out actions pursuant to this Order. Neither SC Holdings nor any contractor shall be considered an agent of the State.
- 20.2 SC Holdings waives any and all claims or causes of action against the State of Michigan and its departments, agencies, officials, agents, employees, contractors, and representatives for damages, reimbursement, or set-off of any payments made or to be made to the State that arise from or on

account of any contract, agreement, or arrangement between SC Holdings and any person for performance of Response Activities at the Facility, including claims on account of construction delays.

- 20.3 SC Holdings shall indemnify and hold harmless the State of Michigan and its departments, agencies, officials, agents, employees, contractors, and representatives for any and all claims or causes of action for damages or reimbursement from the State arising from or on account of any contract, agreement, or arrangement between SC Holdings and any person for performance of Work at the Facility, including claims on account of construction delays.
- near the site, SC Holdings shall secure, and shall maintain for the duration of this Order, comprehensive general liability insurance with limits of Two Million dollars (\$2,000,000.00), combined single limit, naming the MDNR, the Attorney General, and the State of Michigan as additional insureds. If SC Holdings demonstrates by evidence satisfactory to the MDNR that any contractor or subcontractor maintains insurance equivalent to that described above, then with respect to that contractor or subcontractor, SC Holdings needs to provide only that portion, if any, of the insurance described above that is not maintained by the contractor or subcontractor. Regardless of the method used to insure, SC Holdings shall provide the MDNR and the Attorney General with certificates evidencing said insurance and the

MDNR's, the Attorney General and the State of Michigan's status as additional insureds within 30 days after entry of this Order. In addition, for the duration of this Order, SC Holdings shall satisfy, or shall ensure that its contractors or subcontractors satisfy, all applicable laws and regulations regarding the provision of Workers' Disability Compensation Insurance for all persons performing response action on behalf of SC Holdings in furtherance of this Order. Prior to commencement of the Work under this Order, SC Holdings shall provide shall provide to the MDNR satisfactory proof of such insurance.

XXI. PUBLIC REVIEW OF REPORTS

21.1 When the MDNR determines that the Phase II and III RI/FS required under this Order is acceptable for public review, the Phase II and III RI/FS shall be made available by the MDNR for public comment for a period of not less than thirty (30) days. The dates and length of the public comment period shall be established by the MDNR. Following the public review and comment period, the MDNR may refer the Phase II and III RI/FS back to SC Holdings for revision pursuant to public comments and MDNR comments. In addition, SC Holdings shall provide information for the responsiveness summary as required by the MDNR. SC Holdings

shall prepare all portions of a draft responsiveness summary specified by the MDNR. The MDNR will prepare the final responsiveness summary for the Phase II and Phase III RI/FS.

XXII. MODIFICATIONS/INCORPORATION BY REFERENCE

- 22.1 If this Order, other than the SOW, Work Plan or Time Schedules contained herein, is modified, such modifications shall be in writing by signature of the Director of the MDNR and Attorney General and SC Holdings' designated Project Coordinator or other authorized representative. Amendments to the SOW, the Work Plan and Time Schedules contained in this Order shall be made in writing by the MDNR Project Coordinator.
- 22.2 The Phase II and Phase III RI/FS and Time Schedules contained therein are incorporated into this Order and are an enforceable part thereof. Any plans, specifications, and schedules required by this Order are, upon approval by the MDNR, incorporated into this Order and made enforceable parts thereof.

XXIII. DELAYS IN PERFORMANCE

23.1 Any delay attributable to a Force Majeure shall not be deemed a violation of SC Holdings' obligations under this Order in accordance with this Section.

- 23.2 SC Holdings shall perform the requirements of this Order within the time limits established herein, unless performance is prevented or delayed by events which constitute a "Force Majeure". "Force Majeure" is defined, for the purpose of this Order, as an occurrence or nonoccurrence arising from causes not foreseeable, beyond the control of and without the fault of SC Holdings and which could not be avoided or overcome by due diligence. "Force Majeure" does not include unanticipated or increased costs, changed financial circumstances, commencement of a proceeding in bankruptcy, contractual disputes, or failure to obtain a permit or license as a result of SC Holdings actions or omissions.
- constitute a Force Majeure, SC Holdings shall notify the MDNR by telephone or telefax of the circumstances within twenty-four (24) hours after it first becomes aware of those circumstances. Within five (5) working days after SC Holdings first become aware of such circumstances, SC Holdings shall supply the MDNR, in writing, an explanation of the cause(s) of any actual or expected delay, the anticipated duration of the delay, the measures taken, and to be taken, by SC Holdings to avoid, minimize, or overcome the delay, and the timetable for implementation of such measures. Failure of SC Holdings to comply with the written notice

provision of this subsection shall constitute a waiver of SC Holdings' right to assert a claim of Force Majeure with respect to the circumstances in question.

- 23.4 If the MDNR agrees that a delay is or was caused by Force Majeure, SC Holdings delay shall be excused and the MDNR shall provide SC Holdings such additional time as may be necessary to compensate for the Force Majeure event. In no event shall the additional time be longer than the duration of the Force Majeure event. SC Holdings shall have the burden of demonstrating (i) that the delay is or was caused by a Force Majeure event; and (ii) that the amount of additional time requested is necessary to compensate for that event.
- 23.5 An extension of one compliance date based upon a particular Force Majeure incident does not mean that SC Holdings qualifies for an extension of a subsequent compliance date without meeting its burden of proof as specified in Section XXIII for each incremental step or other requirement for which an extension is sought.

XXIV. DISPUTE RESOLUTION

24.1 If SC Holdings objects to any notice of disapproval, modification, or decision made pursuant to this Order, SC Holdings shall notify the MDNR, in writing, of its objections within seven (7) days of receipt of the notice. The

MDNR and SC Holdings shall have ten (10) days from the receipt by the MDNR of the notification of objection to reach agreement. If agreement cannot be reached on any issue within this ten (10) day period, the MDNR shall provide written statement of its decision to SC Holdings and SC Holdings shall commence the activities required by the MDNR decision within five (5) days of receipt of the MDNR decision.

- 24.2 In the event SC Holdings does not commence the activities required by the MDNR decision, the MDNR, in cooperation with the Department of Attorney General, may take such civil enforcement actions against SC Holdings as may be provided for by Sections 10f(4) and 16(1) of MERA, MCL 299.610f(4) and MCL 299.616(1), and other statutory and/or equitable authorities, including, but not limited to, the assessment of such civil penalties or damages as are authorized by law. In such an event, the MDNR retains the right to perform necessary response activities and to recover the costs thereof from SC Holdings. Engagement of a dispute resolution among the parties shall not be cause for the delay of any Work.
- 24.3 During the pendency of any dispute concerning the reimbursement of costs or the payment of stipulated penalties, SC Holdings shall pay that portion of a demand, with any applicable interest, that is subject to a good faith dispute into the Environmental Escrow established pursuant to Section IX.

 Notwithstanding the invocation of the dispute resolution,

stipulated penalties shall accrue from the first day of any failure or refusal to comply with any term or condition of this Order. Penalties shall be paid into this account as they continue to accrue, at least every seven (7) days. Upon each deposit, SC Holdings shall provide the MDNR with a copy of the deposit slip. Within ten (10) days of the MDNR decision, the escrow agent shall pay the balance of the account, or any relevant portion thereof, to the MDNR in the manner provided Section XXV and/or to SC Holdings to the extent each party prevailed in dispute resolution.

- 24.4 Notwithstanding this Section, SC Holdings shall pay that portion of a demand for reimbursement of costs or payment of stipulated penalties that is not subject to a good faith resolution in accordance with and in the manner provided in Sections XXV and XXVI, as appropriate.
- 24.5 No action or decision of the MDNR or the Attorney General shall constitute final Agency action giving rise to any rights of judicial review, prior to the Attorney General's initiation of judicial action to compel SC Holdings to comply with this Order or to enforce a term, condition or other action required by this Order in accordance with Section 16 of of MERA, MCL 299.616. Nothing in this Order shall expand SC Holdings' ability to obtain pre-enforcement review of this Order.

XXV. REIMBURSEMENT OF COSTS

- 25.1 For the purposes of this Order, the term "costs incurred" is defined as costs that have been disbursed or paid out by the State. It does not include costs that are due or owed by the State.
- 25.2 Within thirty (30) days after the effective date of this Order, SC Holdings shall pay the MDNR One Million, Sixteen Thousand, Five Hundred Forty Seven dollars (\$1,016,547.00) in reimbursement of response activity costs incurred by the MDNR for response activity relating to the Facility.
- 25.3 As soon as possible after each anniversary of the effective date of this Order, pursuant to Sections 10f(4) and 16(1) of MERA, MCL 299.610f(4) and MCL 299.616(1), the MDNR will provide SC Holdings with a written demand of response activity costs incurred by the State in overseeing or verifying the conduct of the response activity, including, but not limited to, reviewing, developing, or modifying submissions; split sampling; sample analysis; undertaking an action to prevent or abate a release, threat, or endangerment; travel expenses; overseeing field response activity; entering into a contract with a contractor to oversee or verify any or all portions of the response activity; securing access to any property which is required for the performance of the response activity; and

enforcing, monitoring and documenting compliance with this Order.

Any such demand will set forth with reasonable specificity the

nature of the costs incurred.

25.4 Costs recovered pursuant to this Section shall be deposited in the Environmental Response Fund in accordance with the provisions of Section 9(3) of MERA, MCL 299.609(3). SC Holdings shall also have the right to request a full and complete accounting of all demands made hereunder. Except as provided by Section XXIV, SC Holdings shall reimburse the MDNR for such costs within sixty (60) days of receipt of a written demand from the MDNR. In any challenge by SC Holdings to a demand for recovery of costs by the MDNR, SC Holdings shall have the burden of establishing that the costs were not lawfully incurred, in accordance with Section 12(2)(a) of MERA, MCL 299.612(2)(a), and were inconsistent with the NCP. All payments required pursuant to this Order shall be by check made payable to the "State of Michigan", and shall be sent by first-class mail to the following address:

Assistant Attorney General In Charge Environmental Protection Division 640 Law Building Lansing, Michigan 48913

The Facility name and Order Docket number shall be identified on each check. A copy of the transmittal letter and the check shall be provided simultaneously to the MDNR Project Coordinator.

XXVI. STIPULATED PENALTIES

26.1 Except as provided by Sections XXIII and XXIV, if SC Holdings fails or refuses to comply with any term or condition in Sections VII, VIII, IX, XIII, XIV, XXV and XXVI, SC Holdings shall pay the MDNR stipulated penalties in the following amounts for each day for every failure or refusal to comply or conform:

Period of Delay	Penalty Per Violation Per Day
÷	
1st through 15th day	\$1,250.00
16th through 30th day	\$ _2,500.00
Beyond 30 Days	\$5,000.00

- 26.2 Except as provided in Sections XXIII and XXIV, if SC Holdings fails or refuses to comply with any other term or condition of this Order, SC Holdings shall pay the MDNR stipulated penalties of \$1,250.00 a day for each and every failure or refusal to comply.
- 26.3 Stipulated penalties shall begin to accrue on the day performance was due, or other failure or refusal to comply occurred, and shall continue to accrue until the final day of correction of the noncompliance. Separate penalties shall accrue for each separate failure or refusal to comply with the terms and conditions of this Order.
- 26.4 Except as provided in Section XXIV, stipulated penalties owed to the MDNR shall be paid no later than thirty (30) days after receiving a written demand from the MDNR.

 Payment shall be made in the manner provided in Section XXV.

Interest shall accrue on the unpaid balance at the end of the thirty (30) day period at the rate provided for in Section 12(4) of MERA, MCL 299.612(4). Failure to pay the stipulated penalties within thirty (30) days after receipt of a written demand constitutes a further violation of the terms and conditions of this Order.

26.5 Liability for or payment of stipulated penalties are not the MDNR's exclusive remedy in the event SC Holdings violates this Order. The MDNR reserves the right to pursue any other remedy or remedies that it is entitled to under this Order or any applicable law for any failure or refusal of SC Holdings to comply with the requirements of this Order.

XXVII. COVENANT NOT TO SUE BY THE STATE

27.1 In consideration of the actions that will be performed and the payments that will be made by SC Holdings under the terms of this Order, and except as specifically provided in this Section, the State of Michigan covenants not to sue or to take further administrative action against SC Holdings for Covered Matters.

- 27.2 "Covered Matters" shall include any liability to the State of Michigan under applicable state and federal law relating to the facility for the following:
 - (a) Performance of the agreed upon response activity by SC Holdings under the Order;
 - (b) Reimbursement of past costs incurred by the State as set froth in Paragraph 25.2 of this Order; and
 - (c) Payment of oversight costs incurred by the State as set forth in Paragraph 25.3 of this Order.
- 27.3 The covenant not to sue set forth in this Section does not pertain to any matters other than those expressly specified in "Covered Matters" in Paragraph 27.2. The State reserves, and this Order is without prejudice to, all rights against SC Holdings with respect to all other matters including, but not limited to the following:
 - (a) Liability arising from violations by SC Holdings of a requirement of this Order, including conditions of approved submittals required herein;

- (b) Liability for any other response activity required at the Facility;
- (c) Liability for response activity costs other than those referred to in Section XXV;
- (d) Liability arising from past, present or future treatment, handling, disposal, release or threat of release of hazardous substance(s) outside of the Facility and not attributable to the Facility;
- (e) Liability arising from the past, present or future treatment, handling, disposal, release or threat of release of hazardous substance(s) taken from the Facility;
- (f) Liability for damages for injury to, destruction of, or loss of natural resources;
- (g) liability for criminal acts;
- (h) Any matters for which the State is owed indemnification under Section XX of this Order; and

- (i) Liability for violations of federal or state law which occur during or after implementation of the response activity.
- costs incurred prior to the effective date of this Order, this covenant not to sue shall take effect upon receipt by the MDNR of the payments required by Paragraph 25.2. With respect to liability for performance of response activities required to be performed under this Order, and response activity costs incurred by the State after the effective date of this Order and reimbursement of those costs by SC Holdings pursuant to Section XXV of this Order, the covenant not to sue shall take effect upon issuance by the MDNR of the Certification of Completion of RI/FS in accordance with Section XXXI. The covenant not to sue is conditioned upon the complete and satisfactory performance by SC Holdings of their obligations under this Order. The covenant not to sue extends only to SC Holdings and does not extend to any other person.
- 27.5 Notwithstanding any other provision of this
 Order, the State reserves, and this Order is without prejudice
 to, the right to institute proceedings in this action or in a new
 action or to issue an administrative order seeking to compel
 SC Holdings to perform further response activities relating to

the facility or to reimburse the State of Michigan for additional costs of response if, prior to Certification of Completion of the RI/FS:

- (a) Conditions at the Facility, previously unknown to the MDNR, are discovered after the entry of this Order; or
- (b) Information is received, in whole or in part, after the entry of this order; and

these previously unknown conditions or this information together with any other relevant information indicates that the response activity is not protective of the public health, safety or welfare or the environment.

27.6 Notwithstanding any other provision of this Order, the State reserves, and this Order is without prejudice to, the right to institute proceedings in this action or in a new action or to issue an administrative order seeking to compel SC Holdings to perform further response activities relating to the Facility or to reimburse the State of Michigan for additional costs of response if, subsequent to Certification of Completion of the RI/FS:

- (a) Conditions at the Facility, previously unknown to the MDNR, are discovered after the Certification of Completion of RI/FS; or
- (b) Information is received, in whole or in part, after the Certification of Completion of RI/FS; and

these previously unknown conditions or this information together with other relevant information indicate that the response activity is not protective of the public health, safety or welfare or the environment.

27.7 For purposes of Paragraph 27.5, the information previously received by and the conditions known to the MDNR shall include only that information and those conditions set forth in the administrative record supporting the response activities at the time of entry of this Order. For purposes of Paragraph 27.6, the information previously received by and the conditions known to the MDNR shall include only that information and those conditions set forth in the administrative record supporting the response activities, and any information received by the MDNR pursuant to the requirements of this Order prior to certification of Completion of the RI/FS.

27.9 Notwithstanding any other provision of this Order, the MDNR retains all authority and reserves all rights to take any and all response activities authorized by law.

XXVIII. COVENANT NOT TO SUE BY WASTE MANAGEMENT

- 28.1 SC Holdings hereby covenants not to sue and agrees not to assert any claim or cause of action against the State of Michigan with respect to the Facility or response activities relating to the Facility arising from this Order, including, but not limited to, any direct or indirect claim for reimbursement from the Environmental Response Fund pursuant to Section 10f(5) of the MERA, MCL 299.610f(5) or any other provision of law.
- 28.2 In any subsequent administrative or judicial proceeding initiated by the Attorney General for injunctive relief, recover of response activity costs, or other appropriate relief relating to the Facility, SC Holdings agrees not to assert, an may not and shall not maintain any defense or claim based upon the principles of waiver, res judicata, collateral estoppel, issue preclusion, claim-splitting or other defenses based upon any contention that the claims raised by the MDNR or the Attorney General in the subsequent proceeding were or should

have been brought in this case; provided, however, that nothing in this Paragraph affects the enforceability of the covenants not to sue set froth in Section XXVIII.

XXIX. RESERVATION OF RIGHTS BY THE MONR

29.1 The MDNR and the Attorney General reserve the right to bring an action against SC Holdings under federal and state law for any costs incurred in the event that the MDNR and the Attorney General perform all or a portion of the Response Activities as well as any future costs incurred by the MDNR and the Attorney General in connection with Response Activities conducted at this Facility. The MDNR and the Attorney General expressly reserve any and all rights and defenses that they may have to enforce this Order against SC Holdings including the MDNR's right both to disapprove of Response Activities performed by SC Holdings and to require SC Holdings to perform tasks in addition to those detailed in this Order. The MDNR and the Attorney General reserve the right to undertake actions under federal and state law, including any Response Activities at any time and to perform any and all portions of the Response Activity which SC Holdings fails to perform to the their satisfaction. Execution of this Order shall not affect or limit in any way any rights which the MDNR or the Attorney General may have in relation to any liabilities or obligations which SC Holdings or other persons may be subject to under MERA or other laws by virtue of any connections that SC Holdings or those other persons

have or may have had with the Facility. The MDNR and the Attorney General reserve any and all rights to take any enforcement action pursuant to any available legal authority, including the right to seek injunctive relief, response costs, monetary penalties, and punitive damages for any violation of law or this Order.

29.2 Nothing in this Order shall constitute or be construed as a release or covenant not to sue regarding any claim, cause of action, or demand in law or equity against any person, firm, trust, trustee, joint venture, partnership, corporation, or other entity, for any liability it may have arising out of or relating in any way to the generation, storage, treatment, handling, transportation, release, or disposal of any hazardous substances, hazardous wastes, pollutants, contaminants, or injurious substances found at, taken to, or taken from the Facility. This Order shall not estop or limit any legal or equitable claims of the State against SC Holdings its employees, authorized representatives or assigns, including, but not limited to, claims related to releases of hazardous substances, pollutants, contaminants, or injurious substances. consideration of the entry of this Order, SC Holdings agrees not to assert any causes of action, claims, or demands against the

State of Michigan, its agencies, officials, employees and authorized representatives regarding matters covered by this Order.

XXX. CONTRIBUTION PROTECTION

30.1 Pursuant to Section 12c(5) of MERA, MCL 299.612 c(5) and to the extent provided in Section XXVIII, SC Holdings shall not be liable for claims for contribution regarding matters addressed in this Order. Entry of this Order does not discharge the liability of any other person(s) liable under Section 12 of MERA, MCL 299.612. In any action by SC Holdings for contribution from any person not a party to this Order, SC Holdings' cause of action shall be subordinate to the right of the State of Michigan if the State files an action pursuant to MERA or other applicable federal or state law, in accordance with Section 12c(8) of MERA, MCL 299.612c(8).

XXXI. CERTIFICATION

31.1 SC Holdings Management determines that it has completed all the Work required by this Order, it shall submit to the MDNR a notification of Completion and a draft final report.

The draft final report shall summarize all response actions performed under this Order. The draft final report shall include or reference any supporting documentation.

31.2 Upon receipt of the Notification of Completion, the MDNR will review the Notification of Completion, the draft final report, any supporting documentation, and the actual response actions performed pursuant to this Order. Within ninety (90) days of receipt of the Notification of Completion, the MDNR will determine whether SC Holdings has satisfactorily completed all requirements of this Order, including, but not limited to, completing the Work required by this Order, complying with all terms and conditions of this Order, and paying any and all cost reimbursement and stipulated penalties owed to the MDNR. If the MDNR determines that all requirements have been satisfied, the MDNR will so notify SC Holdings and upon receipt of a "Final" final report in accordance with Section XVIII, shall issue a Certificate of Completion.

XXXII. SEPARATE DOCUMENTS

32.1 This Order may be executed in two (2) or more counterparts, each of which shall be deemed an original, but all of which together shall constitute one and the same instrument.

XXXIII. EFFECTIVE DATE

This Order is effective upon the date that SC Holdings receives written notice that the Director has signed the Order. All times for performance of obligations under this Order shall be calculated from the effective date. For the purposes of this Order, the term "day" shall mean a calendar day unless otherwise noted herein.

Mail ship.

IT IS SO AGREED AND ORDERED BY:

Roland Harmes, Director

Michigan Department of Natural Resources

Paul F. Novak (P39524)

Assistant Attorney General

Environmental Protection Division

IT IS SO AGREED BY:

Robeff E. Leininger

Environmental Counsel

SC Holdings, Inc.

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APPENDIX A

COST SHARING AGREEMENT

SC HOLDINGS, INC. AND PLAINFIELD TOWNSHIP FOR THE

PLAINFIELD TOWNSHIP VERSLUIS WELLFIELD SITE, AIR STRIPPER, TOWNSHIP ORDINANCE, AND WATER MAIN EXTENSION

This Agreement is made and entered into at Plainfield Township, Michigan, this 19th day of November, 1993, by and between SC Holdings, Inc., a Pennsylvania corporation having its principal place of business located at 17250 Newburgh Avenue, Suite 100, Livonia, Michigan 48152 (hereinafter called SC Holdings) and Plainfield Charter Township, a Municipal Corporation having its principal office located at 6161 Belmont Avenue, Belmont, Michigan 49306 (hereinafter called Plainfield Township).

WITNESSETH:

WHEREAS, SC Holdings owns a closed landfill known as State Disposal Landfill located between Four and Five Mile Road on the east side of the East Beltline Highway in the township of Plainfield, County of Kent, State of Michigan, which is located on approximately 256 acres of undeveloped property owned by SC Holdings,

WHEREAS, the State Disposal Landfill is included on the National Priorities List (NPL) in accordance with Section 105 of the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) and also on the Act 307 list in accordance with the Michigan Environmental Response Act (MERA),

WHEREAS, SC Holdings has completed a Phase I Remedial Investigation (RI) of the State Disposal Landfill site at the request of and under the direction of the Michigan Department of Natural Resources (MDNR) and that the result of the RI indicates the presence of certain volatile organic compounds (VOCs) dissolved in groundwater apparently originating from the State Disposal Landfill site and extending to the vicinity of Hordyke Road north of the landfill,

WHEREAS, the Plainfield Township Versluis Wellfield site is also included on the NPL and the Act 307 list and has been found to contain dissolved VOCs the source of which could not be determined by a 1991 Hydrogeologic Investigation sponsored by MDNR.

NOW THEREFORE, in consideration of the mutual promises, covenants and conditions contained herein, the parties hereby agree as follows:

Plainfield Township will design, construct and operate a 16 million gallon per day drinking water supply and treatment facility to serve Plainfield Township. Plainfield Township shall be responsible for all such costs relating to the

SC HOLDINGS, INC. AND PLAINFIELD TOWNSHIP FOR THE

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drinking water supply and treatment facility except those which SC Holdings, Inc. has specifically accepted pursuant to Paragraphs 2 and 3 of this Agreement.

Within 60 days of receiving sufficient cost documentation, SC Holdings will reimburse Plainfield Township for all prior costs as hereinafter defined and all reasonable capital costs associated with the purchase and installation of an air stripper unit and associated housing, piping and controls sufficient to treat and remove to an acceptable level the VOCs present in the groundwater withdrawn by the Versluis Wellfield.

"Prior costs" as used in this paragraph shall mean costs previously billed to Waste Management and includes installation of sampling wells and monitoring wells, laboratory work and engineering associated with the preliminary investigation of groundwater contamination. The term shall also include engineering expense incurred in meetings since the start of the project. This cost shall not exceed \$67,323.55.

- 3. SC Holdings will pay to Plainfield Township all actual costs of operation and maintenance of the air stripper unit within 60 days of receipt of an invoice therefor from the Township. SC Holdings, Inc. shall continue to pay the actual cost to Plainfield Township for continued air stripper operation and maintenance costs for forty (40) years or until four consecutive quarters of monitoring shows that Volatile Organic Compounds (VOCs) are below all applicable limits established under Federal, State or County laws or regulations. SC Holdings shall be relieved from responsibility to pay costs under this paragraph to the extent that it can demonstrate that another identified source is causing the VOC contamination of the aforesaid wells.
- 4. SC Holdings will reimburse Plainfield Township for all reasonable material and installation costs associated with the extension of the Plainfield Township water main from its current endpoint on Grand River Drive to a location approximately three thousand (3,000) feet southeast so that all existing residences situated in Section 25 downgradient of the State Disposal landfill who are currently using individual

SC HOLDINGS, INC. AND PLAINFIELD TOWNSHIP FOR THE

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drinking water supply wells can be connected to the Plainfield Township Municipal Water Supply. SC Holdings will also pay for the installation of individual service lines that will be used to connect individual residences to the water main and the costs associated with connecting the residence to the individual service lines. SC Holdings will also pay for the abandonment of the individual drinking water supply wells in accordance with the Michigan Department of Public Health regulations. SC Holdings will also pay for the installation, operating and maintenance cost of a point-of-use treatment system capable of providing potable water to the house at 5057 Grand River Drive located in Section 26 if providing water service is not cost effective. If the landowner and/or resident of one of the existing residences along the Grand River Drive does not agree to have their drinking well water so abandoned, then SC Holdings will not be obligated to arrange the installation of such individual service line. Holdings will pay all costs required under this paragraph within 60 days of receipt of sufficient cost documentation.

- 5. SC Holdings will convey to Plainfield Township the property described in the Attachment hereto which SC Holdings currently owns for the purpose of construction of a water tower to be a part of the Plainfield Township Municipal Water Distribution System and agrees to hold the Township harmless from any and all liability concerning such conveyed property resulting from groundwater contamination caused by the State Disposal Landfill. As part of the deeding of this parcel to Plainfield Township, SC Holdings shall deduct \$22,760 from its payment to Plainfield Township, as described in Sections 2 and 3 of this Agreement which is the current fair market value of the parcel.
- 6. Within 30 days of the effective date of this Agreement, Plainfield Township will in so far as it has the legal authority to do so, enact or cause to be enacted an ordinance or other regulation which will require the connection of houses, existing and future, to the public water system which are situated in Section 25 of the Township and front on Grand River Drive from the West section line to a point 2,600 feet Southeast along the centerline of Grand River Drive, to and including parcel 016. Such Ordinance shall prohibit the future installation of individual drinking water wells in the aforesaid area of Plainfield Township.

COST SHARING AGREEMENT BETWEEN SC HOLDINGS, INC. AND PLAINFIELD TOWNSHIP FOR THE

PLAINFIELD TOWNSHIP VERSLUIS WELLFIELD SITE,
AIR STRIPPER, TOWNSHIP ORDINANCE,
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- 7. Plainfield Township and its consultants and/or contractors, will continue to work cooperatively with SC Holdings and its consultants and/or contractors in the event that SC Holdings is required by the Michigan Department of Natural Resources to undertake additional measures to address potential contamination not captured by the existing Plainfield Township Versluis Wellfield. This cooperation may include use of the air stripper discussed in Section 1 and 2 of this Agreement in a manner which is mutually acceptable to Plainfield Township and SC Holdings.
- 8. This Agreement settles and releases SC Holdings and its successor and predecessor corporations from all claims which may be brought by Plainfield Township concerning the design, construction, operation and maintenance of the drinking water treatment system for the aforesaid wells.
- 9. Each party, as the Indemnifying Party, agrees to indemnify the other party, as the indemnified Party, against all losses, costs, damages, and other related expenses which may be suffered by the Indemnified Party by reason of the negligence of the Indemnifying Party in carrying out this Agreement. In addition, each party, as the Indemnifying Party, agrees to indemnify the other party, as the Indemnifying Party, against all claims, losses, damages, and related expenses arising out of the performance of this Agreement except those that occur by reason of the negligence or willful misconduct of the Indemnified Party.
- 10. SC Holdings and Plainfield Township agree to comply with all laws, regulations and ordinances applicable to their performance of this Agreement.
- 11. This Agreement shall be effective on the date that SC Holdings receives a copy of this Agreement duly executed by Plainfield Township.
- 12. By entering into this Agreement, SC Holdings does not admit to and specifically denies any and all liability with respect to the contamination of or damage to the Plainfield Township Versluis Wellfield.
- 13. Any notice to a party under the terms of this Agreement shall be deemed given if mailed by United States certified mail,

SC HOLDINGS, INC. AND PLAINFIELD TOWNSHIP FOR THE

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postage prepaid, addressed to the current mailing address of each party. The present mailing addresses of the parties are, respectively, as follows:

SC Holdings, Inc. c/o Waste Management, Inc. - Midwest 17250 Newburgh Road, Suite 100 Livonia, MI 48152

Plainfield Township 6161 Belmont Road Belmont, MI 49306 Attention: Beverly Rekeny, Township Supervisor

Each party agrees to notify the other of change of address.

14. Neither party may assign this Agreement or any part thereof without prior written consent of the other party.

IN WITNESSETH WHEREOF, this Agreement has been duly executed by SC Holdings, Inc. and Plainfield Charter Township by their duly authorized officers and representatives:

BY: Afrit E Line	Date:	11-19- 43
Title Environmental Counsel		
Plainfield Township BY: Jourly & Likeny Title Junerovan	Date:	11-22-93
		00000000000000000000000000000000000000

APPENDIX B

SCOPE OF WORK

SLATEMENT OF WORK FOR CONDUCTING A REMEDIAL INVESTIGATION AND FEASIBILITY STUDY AT THE STATE DISPOSAL LANDFILL/PLAINFIELD TOWNSHIP WELLS SITE PLAINFIELD TOWNSHIP, MICHIGAN

This document constitutes the Statement of Work (SOW) to conduct a Phase III Remedial Investigation and a Feasibility Study (RI/FS) at the State Disposal Landfill/Plainfield Township Wells Site ("State Disposal Site" or "Site") in Plainfield Township, Michigan. The purpose of a SOW document is to provide the direction and intent for the RI/FS process. A Phase I RI was completed in November of 1991 which investigated contaminated groundwater at the site and a Phase II RI is currently underway to characterize the landfill portion of the site for the purpose of a risk assessment. It is recognized that data and other pertinent information have already been generated during previous investigations, therefore, existing data may be evaluated and incorporated into the Phase III RI report to eliminate duplication of effort. The remaining language in this SOW generally addresses items needed to fulfill the requirements for a RI/FS.

A Phase III RI/FS Workplan will be developed which will provide more detailed guidance on the execution of the RI/FS. The purpose of the Phase III RI is to determine the nature and extent of groundwater contamination and determine the nature and extent of contamination of other media's not adequately delineated in either the Phase I RI or the Phase II RI. The study area for the site is defined as Four Mile Road to the south, East Beltline to the west and Walnut Drive Park to the North which includes the Plainfield Township Wellfield located between Grand River Drive and the Grand River.

The purpose of the FS is to develop and evaluate appropriate remedial action alternatives based on all Phases of the RI data and reports. All personnel, materials, and services required to perform the RI/FS will be provided by the Potentially Responsible Party (PRP).

The Phase III RI/FS Work Plan to be developed pursuant to this SOW will present a phased approach that recognizes the interdependence of the RI and FS. The data collected in the all phases of the RI influence the development of remedial alternatives in the FS, which in turn affects the data needs and scope of treatability studies and additional field investigations. The U.S. Environmental Protection Agency's (EPA) October 1988 "Draft Guidance for Conducting Remedial Investigations and Feasibility Studies under CERCIA" should be utilized in the preparation of the Work Plan and the execution of the RI/FS.

In the following sections, brief discussions of the major RI/FS tasks are presented, by three major topical categories:

*Plans and Management;

*Remedial Investigation (RI); and

*Feasibility Study (FS).

PLANS AND MANAGEMENT

TASK O - WORK PLAN PREPARATION

A Phase III RI/FS Work Plan (WP) will be prepared for the State Disposal Landfill site that details the technical approach, personnel requirements, and schedule for each task described in this SOW. The schedule will show the implementation of tasks and submission of deliverables in weeks subsequent to approval and acceptance of prior deliverables. Incorporated into the WP will be several specific plans addressing sampling, quality assurance/quality control (QA/QC) and health and safety. These specific plans are as follow:

Field Sampling Plan

A Sampling Plan (SP) that addresses all data acquisition activities will be prepared. The plan will contain a statement of sampling objectives, specification of equipment, required analyses, sample types, sample locations, and frequency. The plan will address specific hydrologic, hydrogeologic, and air transport characterization methods including, but not limited to, geologic mapping, geophysics, field screening, drilling and well installation, groundwater flow determination, and sampling. The application of these methods will be described for each major subtask within the site investigation (e.g., waste characterization, migration pathway assessment, and contaminant characterization). The plan will also identify the data requirements of specific remedial technologies which may be necessary to evaluate remedial alternatives in the FS. The Compendium of Superfund Field Operations Method (EPA/540/P-87/001a, OSWER Directive 9355.0-14, Sept. 1987) and Characterization of Hazardous Waste Sites - A Methods Manual: Volume II. Available Sampling Methods (EPA/600/4-84-076, Dec. 1984) will be utilized in the selection and definition of field methods, sampling procedures, and custody.

Quality Assurance Project Plan

A Quality Assurance Project Plan (QAPP), prepared in accordance with current EPA guidance, will be appended to the SP. The purpose of the QAPP is to ensure that formal procedures are available for all activities affecting the quality of data collected.

The QAPP will be prepared according to EPA guidance documents, and will include the following 16 elements:

- Title page with provisions for approval signatures;
- Table of contents;
- Project description;
- Project organization and responsibility;
- QA objectives for measurement data in terms of precision, accuracy, completeness, representativeness and comparability (for each parameter);

- 6. Sampling procedures:
- 7. Chain of custody procedures;
- Calibration procedures and frequency;
- Analytical procedures;
- 10. Data reduction, validation and reporting;
- 11. Incernal quality control checks;
- 12. Performance and system audits and frequency;
- 13. Preventive maintenance procedures and schedules;
- 14. Specific routine procedures to be used to assess data precision, accuracy, and completeness of specific measurement parameters involved;
- 15. Corrective action;
- 16. Quality assurance reports to management.

Health and Safety Plan

A Health and Safety Plan (HSP) will be prepared to address hazards that investigation activities may present to the investigation team and to the surrounding community. The HSP will conform to applicable regulatory requirements and guidance, including the EPA Standard Operating Safety Guides, and will detail personnel responsibilities, protective equipment, procedures and protocols, decontamination, and training and medical surveillance as required under 29 GFR 1910.120, and Michigan OSHA. The plan will identify problems or hazards that may be encountered and their solutions. Procedures for protecting third parties, such as visitors or the surrounding community, will also be provided.

ATSDR Health Assessment

The WP for the site shall provide for collection of adequate information to support at ATSDR Health Assessment which is required by SARA. Since the health assessment will be prepared by ATSDR, all draft Work Plans and support documents will be submitted for ATSDR review and comment (by the Michigan Department of Natural Resources (MDNR) Project Manager (PM)) to ensure that their needs and requirements are being met. In the event that the health assessment has already been completed by the ATSDR, the RI will include and address any findings and data deficiencies of that report.

The RI/FS WP will be developed and implemented in conformance with all provisions of this SOW, and the standards set forth in the following statutes, regulations, and guidance:

*Section 121 of CERCLA as amended by SARA;

*EPA March 1988 Guidance on Conducting Remedial Investigations and Feasibility Studies under CERCLA;

*National Contingency Plan, dated November 1985, as amended;

*Additional guidance documents provided by the MDNR and the EPA.

REMEDIAL INVESTIGATION

Objectives and Scope

The objectives of the Phase III RI are to:

- *Characterize the Landfill "hotspots" identified in the Phase II RI;
- *Characterize the hydrogeologic and physical setting to determine the actual or most likely contaminant migration pathways and physical features that could effect potential remedial actions;
- *Determine the migration rates, extent, and characteristics of contamination that may be present at and from the site;
- *Gather data and information to the extent necessary and sufficient to quantify risk to public health and the environment and to support the development and evaluation of viable remedial alternatives in the FS.

The remedial investigation consists of four tasks:

- Task 1: Description of Jurrent Situation and Investigative Support
- Task 2: Site Investigation
- Task 3: Site Investigation Analysis
- · Task 4: Reports

A description of each of these tasks is presented in the following section.

TASK 1 - INVESTIGATIVE SUPPORT AND DESCRIPTION OF CURRENT SITUATION

Site Mapping

An accurate topographic map of appropriate working scale and contour interval will be prepared. A base map of the site which encompasses Four Mile Road to the south, East Beltline to the west, and Walnut Park Drive to the north will be prepared from this topographic map, and will have a scale of one inch to 100 feet (1":100') and two foot contour intervals. The base map will illustrate the locations of wetlands, floodplains, water features, drainage patterns, tanks, buildings utilities, paved areas, easements, right-of-ways, and other pertinent features. Larger scale maps will be produced from the base mapping, as necessary.

Surveying will be required to establish horizontal and vertical controls for the site relative to the National Geodetic Vertical Datum of 1929 using State Plane coordinates. In addition to the topographic map, a grid plan will be prepared using the base map and grid overlay at a nominal scale of the map. This grid plan will show the location of existing monitoring wells, additional wells installed, all sampling locations, and water supply wells.

A legal description of the property will be reviewed and field checked. The intent is not to perform a boundary survey, but to locate the boundaries so that future activities do not carry over onto adjacent properties without proper permission.

Meets and Bounds

A legal description of the site will be assembled from existing county and township records and the results of the site survey.

Access Arrangements

*Disposal records.

If required, an executed access agreement to enter the site will be obtained. Further arrangements may include negotiating access agreements for construction of access roads or other activities related to the Phase III RI.

Preparation of Support Facilities

Arrangements will be made to construct the appropriate support facilities and/or procure the equipment necessary to perform a hazardous site investigation. This includes preparation of decontamination facilities, utility hookups, and site access control stations.

Description of Current Situation

The background information pertinent to the site and to environmental concerns will be described, and the purpose of the RI will be further detailed. The data gathered during previous investigations will be reviewed and evaluated and may be incorporated into the Phase III RI report. Regional information will be obtained from available USGS and Michigan Geological Survey reports. The existing site information that will be reviewed may include but will not necessarily be limited to:

*MDNR and U.S. EPA files; *Kent County Soils Conservation Service reports; *Aerial photographs; *Historical water quality data; *EPA and Michigan Geological Survey files;

In addition to this literature search, on-site activities may be used to confirm and/or update certain information. For example, existing monitor wells may be inspected to determine if they are functional. Also, the location and status of selected water supply wells may be field verified.

Information and data that are gathered during these initial steps will be used to generate a preliminary Site Evaluation Report which will address the following:

Site Background

A summary of pertinent boundary conditions, general site physiography, hydrology, and geology will be prepared. A complete site history as it pertains to waste disposal activities and ownership transfer will also be prepared.

Nature and Extent of the Problem

A summary of actual and/or potential on-site and off-site health and environmental effects will be prepared. Threats or potential threats to public health and the environment will be emphasized.

History of Response Actions

A history of response actions conducted by local, state, or private parties will be prepared.

Definition of Boundary Conditions

Site boundary conditions will be established to limit the area of investigation. The boundaries will be set so that the on-site activities will cover the contaminated media in sufficient detail to support the FS. Boundaries for site access control and site boundary security will also be identified. The boundaries of the study area may or may not correspond to the property boundaries.

Identification of Potential Receptors

Potential receptors, human and environmental, will be identified and used in the development of the site conceptual model, migration pathway assessment, and endangerment assessment. Included will be the identification of private and public water supply wells within a 2-mile radius of the site. If possible, well construction details for these wells and other private water supply wells, which may have been previously sampled will be obtained. A table summarizing the known construction details will be prepared and submitted with the original drilling logs, as available.

Develop Site Conceptual Model

Information on the waste sources, pathways, and receptors at the site will be used to develop a conceptual site model to evaluate potential risks to human health and the environment. The conceptual site model will include all known and suspected sources of contamination, types of contaminants and affected media, known and potential routes of migration, and all known or potential

human and environmental receptors. If exact data are unavailable for components of the model, the likely variability in the component will be identified so that the model identifies the possible range of contaminant migration and the potential effects on receptors. This effort, in addition to assisting in identifying where samples need to be taken, will also assist in identifying appropriate remedial technologies.

The Investigative Support and Description of Current Situation (Task 1) will be conducted prior to, or concurrent with, the Work Plan Preparation (Task 0), and incorporated into the Work Plan.

TASK 2 - SITE INVESTIGATION

Investigations necessary to characterize the site and its actual or potential hazard to public health and the environment will be conducted. The investigations will result in data of adequate technical content to support the development and evaluation of remedial alternatives during the FS. Investigation activities will focus on problem definition and data to support the screening of remedial technologies, alternative development and screening, and detailed evaluation of alternatives.

The site investigation activities will follow the Plans set forth in Task 0. Sample analyses will be conducted at laboratories following EPA protocols or their equivalents. Strict chain-of-custody procedures will be followed, and all samples will be located on the site map (and grid system) established under Tasks 0 and 1. A description of the types of investigations that will be conducted is presented below.

Source Characterization

The Phase III RI will be carried out to characterize the nature and extent of groundwater contamination and the physical boundaries and chemical aspects of the existing contaminated groundwater plume and/or other contamination. The investigation of these source areas will involve obtaining data related to:

*Source characteristics (type, quantity, chemical and physical properties, and concentrations); and

*Facility characteristics (type and integrity of any containment, leachate collection systems, and drainage control).

It is anticipated that this information will be obtained from a combination of existing site information, field inspections, and past & future site sampling activities.

The source characterization will culminate in the preparation and submittal of a <u>technical memorandum</u> which will summarize the findings of the source characterization.

Migration Pathway Assessment and Contaminant Characterization

The analytical parameters list used in this subtask will be based on the data collected during the source characterization and review of background information. The selection of parameters or classes of parameters (i.e., volatile organics, metals, etc.) will be based upon their source concentration and their persistence and mobility within the most likely pathway of migration. Provisions will be made for conducting full U.S. EPA Contract Lab Program Target Compound List (TCL) analyses at those monitoring stations where there is a reasonable anticipation of detecting a complex contaminant profile. Samples will be collected, handled, and analyzed in accordance with the protocols and procedures described in the site SP and QAPP. An addendum to the SP and QAPP may be required for this additional sample collection and analyses.

Provisions will be made for conducting additional site investigation activities after completion of Task 7 of the Feasibility Study: Screening of Alternatives. Task 8 of the Feasibility Study outlines these supplemental investigations which are intended to further characterize the sources, pathways, and/or contaminants and to satisfy the specific data requirements of the applicable remedial actions. The Plans for these investigations and the bench/pilot studies will be prepared and submitted for MDNR and U.S. EPA comment and approval.

The contaminant migration pathways at the State Disposal Landfill site will be characterized through the following types of investigations:

Hydrogeologic Investigation

A hydrogeologic study will be performed to further evaluate the subsurface geology and the physical and chemical characteristics of the water bearing formations. This study will define the extent and magnitude of contaminant migration, site hydrostratigraphy, controlling geologic features, zones of preferential ground water transmission, and distribution of hydraulic heads within the water bearing formations. The results of this study will be combined with the existing site data (including previous hydrogeologic studies performed such as groundwater flow patterns) described in the preliminary site evaluation report and the results of the source characterization to define the ground water flow patterns and to determine the vertical and lateral extent of contaminant migration. These data will form the rationale for locating and designing monitoring wells and the subsequent contaminant characterization.

Hydrologic Investigation

Drainage patterns and runoff characteristics will be evaluated for the potential of erosional transport. Chemical and hydrologic characteristics of surface water features such as streams, ponds, and lakes will also be evaluated. Staff gauges may also be used to evaluate the potential of hydraulic connection between surface water bodies and the ground water flow system, and to determine the potential for sediment transport.

Soils and Sediment Investigation

Delineate the nature and extent of soil and sediment contamination that has not been delineated in previous investigations. The physical and chemical characteristics of the site soils and aquatic sediments will be evaluated.

Some elements of this investigation may overlap with the above described investigations. The purpose will be to define areas of contamination and potential ongoing sources of contamination.

Air Quality Investigation

Chemical specific air quality information will be monitored to determine that action levels are maintained during site activities. This investigation should be consistent with all state and federal air quality requirements.

Human Populations

Information will be collected to identify, enumerate, and characterize human populations potentially exposed to contaminants released from the site. For a potentially exposed population, information will be collected on population size and location. Special consideration should be given to identifying potentially sensitive subpopulations such as children, pregnant women, infants, and the chronically ill. The identification of these high-risk subpopulations should be linked with the potential contaminants of concern (i.e., those that are mutagenic, teratogenic, etc.) to identify how these populations may be at risk. Census and other survey data may be used to identify and describe the population exposed to various contaminated media. Information may also be available from USGS maps, land use plans, zoning maps, the West Michigan Shoreline Regional Development Commission, and the city of Grand Rapids.

Ecological Investigations

Biological and ecological information will be collected for use in the risk assessment. It will aid in the evaluation of impacts to the environment associated with this site and also help to identify potential effects with regard to the implementation of remedial actions. The information will include a general identification of flora and fauna in and around the site (including endangered and threatened species and those consumed by humans or found in human food chains) and identification of critical habitats.

Bioassay information may be needed for species that are known to be consumed by humans. Chapter 12 of <u>A Compendium of Superfund Field Operations Methods</u> and Table 1 provide a summary of both environmental information that may be needed and potential collection methods.

It is anticipated that this information will be derived from a combination of existing data information, and data resulting from the field investigations.

TASK 3 - SITE INVESTIGATION ANALYSES

Data Analysis

All site investigation data should be analyzed and a summary of the type and extent of contamination at the site developed. The summary should describe the quantities and concentration of a specific chemical at the site and ambient levels surrounding the site.

An analysis of data collected during this investigation will be made to assure that the quality (e.g., QA/QC procedures have been followed) and quantity of data adequately support the Endangerment Assessment and FS.

Endangerment Assessment

A Contaminant Pathway and Transport Evaluation and Endangerment Assessment will be prepared describing the specific chemicals at the State Disposal Landfill site and ambient levels at the site; the number and location and types of nearby populations; activities and pathways that may result in an actual or potential threat to public health, welfare, or the environment; and a projection of chemical concentrations at the different points of exposure through each media pathway over the likely period of exposure, and calculation of actual or potential risks.

This assessment will be conducted in accordance with the procedures described in the <u>Risk Assessment Guidelines of 1986</u> and the <u>Superfund Public Health Evaluation Manual</u> and will address factors identified in Rule 299.5717 (3), (4) and (5) of the Michigan Environmental Response Act, 1982 PA 307, as amended.

TASK 4 - REPORTS

Progress Reports

Monthly progress reports will be prepared to describe the technical progress of the Phase III RI/FS. These reports shall be submitted to the MDNR Project Manager (PM). The monthly progress reports shall include the following information:

*Progress made this reporting period;

*Problems encountered and resolved;

*Anticipated problems and recommended solution;

*Deliverables submitted;

*Upcoming events/activities planned;

*Key personnel changes;

*Subcontracting;

*Travel;

- *Percent Complete;
- *Schedule.
- *Budget To Date

Technical Memoranda

The results of specific Phase III RI activities will be submitted to the MDNR and the U.S. EPA throughout the RI/FS process. These memoranda will be submitted in draft form and revised upon receipt of MDNR and U.S. EPA comments. The specific technical memoranda include:

*A Site Evaluation Report;

*Technical Memoranda covering the Site Investigations and Analyses.

Remedial Investigation Report

A final report covering the Phase III RI will be completed. The suggested format for the Phase III RI Report is given in Table 2. The report will characterize the site and summarize data collected and conclusions drawn from the preceding tasks. The report will be submitted in draft form for review and comment by the MDNR and EPA. Technical Memorandums prepared previously will be summarized and referenced in order to limit the size of the report. However, the report will completely document the Phase III RI. Upon receipt of comments, a draft final report will be prepared and submitted. The Phase III RI report will not be considered final until a letter of approval is issued by the MDNR PM. A meeting may be scheduled by the MDNR PM to discuss MDNR and EPA comments on the draft Phase III RI report.

Table 1. SUGGESTED RI REPORT FORMAT

Executive Summary

-			
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- 1.1 Purpose of Report
- 1.2 Site Background
 - 1.2.1 Site Description
 - 1.2.2 Site History
 - 1.2.3 Previous Investigations
- 1.3 Report Organization

2. Study Area Investigation

- 2.1 Includes field activities associated with site characterization.

 These may include physical and chemical monitoring of some, but not necessarily all, of the following:
 - 2.1.1 Surface Features (topographic mapping, etc.) (natural and man-made features)
 - 2.1.2 Contaminant Source Investigations
 - 2.1.3 Meteorological Investigations
 - 2.1.4 Surface-Water and sediment Investigations
 - 2.1.5 Geological Investigations
 - 2.1.6 Soil and Vadose Zone Investigations
 - 2.1.7 Ground-Water Investigations
 - 2.1.8 Human Population Surveys
 - 2.1.9 Ecological Investigations
- 2.2 Technical memoranda documenting field activities may be included in an appendix and summarized in this report chapter.

3. Physical Characteristics of the Study Area

- 3.1 Includes results of field activities to determine physical characteristics. These may include some, but not necessarily all, of the following:
 - 3.1.1 Surface Features
 - 3.1.2 Meteorology
 - 3.1.3 Surface-Water Hydrology
 - 3.1.4 Geology
 - 3.1.5 Soils
 - 3.1.6 Hydrogeology
 - 3.1.7 Demography and Land Use
 - 3.1.8 Ecology

Table 1. (continued)

4.	Nature	and	Extent	αĒ	Contamination
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- 4.1 Presents the results of site characterization, both natural chemical components and contaminants in some, but not necessarily all, of the following media:
 - 4.1.1 Sources (lagoons, sludges, canks, etc.)
 - 4.1.2 Soils and Vadose Zone
 - 4.1.3 Ground water
 - 4.1.4 Surface Water and Sediments
 - 4.1.5 Air
- 5. Contaminant Fate and Transport
 - 5.1 Potential Routes of Migration (i.e., air, ground water, etc.)
 - 5.2 Contaminant Persistence
 - 5.2.1 If they are applicable (i.e., for organic contaminants), describe estimated persistence in the study area environment and physical, chemical, and/or biological factors of importance for the media of interest.
 - 5.3 Contaminant Migration
 - 5.3.1 Discuss factors affecting contaminant migration for the media of importance (e.g., sorption onto soils, solubility in water, movement of groundwater, etc.).
 - 5.3.2 Discuss modeling methods and results, if applicable.
- 6. Baseline Risk Assessment
 - 6.1 Public Health Evaluation
 - 6.1.1 Exposure Assessment
 - 6.1.2 Toxicity Assessment
 - 6.1.3 Risk Characterization
 - 6.2 Environmental Assessment
- 7. Summary and Conclusions
 - 7.1 Summary
 - 7.1.1 Nature and Extent of Contamination
 - 7.1.2 fate and Transport
 - 7.1.3 Risk Assessment
 - 7.2 Conclusions
 - 7.2.1 Data Limitations and Recommendations for Future Work
 - 7.2.2 Recommended Remedial Action Objectives

Appendixes

- A. Technical Memoranda on Field Activities
- B. Analytical Data and QA/QC Evaluation Results
- C. Risk Assessment Methods

FEASIBILITY STUDY

Scope

The purpose of the FS for the State Disposal Landfill site is to develop and evaluate remedial alternatives that protect human health and the environment, and present the relevant information needed to allow for the selection of a site remedy which will be protective of human health and the environment.

The FS will conform to Section 121 of CERCIA as amended by SARA; the NCP, as amended; and the FS Guidance, as amended. The FS is comprised of the following tasks:

Task 5: Development of Remedial Action Alternatives

Task 6: Screening of Alternatives

Task 7: Treatability of Supplemental Remedial Investigations

Task 8: Detailed Analysis of Alternatives

Task 9: Feasibility Study Report

The intent and purpose of each of these tasks is outlined in the following sections. The technical approach and schedule for each of these tasks will be detailed in the RI/FS Work Plan.

TASK 5 - DEVELOPMENT OF REMEDIAL ALTERNATIVES

This task may be viewed as consisting of steps that involve making successively more specific definitions of potential remedial activities. These steps are described as follow:

Subtask 5A: Develop Remedial Action Objectives

Sita-specific objectives for remedial action will be established for the State Disposal Landfill site considering the description of the current situation, information gathered during the RI, Section 300.68 of the NCP, EPA interim guidance, and the requirements of other applicable State of Michigan, EPA, and Federal environmental standards, guidance, and advisories.

These objectives consist of medium-specific or operable unit-specific goals for protecting human health and the environment. They will specify: the contaminant(s) of concern; exposure route(s) and receptor(s); and an acceptable contaminant level or range of levels for each exposure route.

Acceptable exposure levels for human health will be determined on the basis of risk factors and contaminant-specific Applicable or Relevant and Appropriate Requirements (ARARs). Contaminant levels in each media will be compared with these acceptable levels, which will be determined on the basis of an evaluation of the following factors:

*For carcinogens, whether the chemical-specific ARARs provides protection within the risk of 10 o and whether achievement of each chemical-specific ARAR will sufficiently reduce the total risk from exposure to multiple chemicals.

*For non-carcinogens, whether the chemical-specific ARAR is sufficiently protective if multiple chemicals are present at the site.

*Whether environmental effects (in addition to human health effects) are adequately addressed by the ARARs.

*Whether the ARARs adequately address all significant pathways of human exposure identified in the baseline risk assessment. For example, if exposure from the ingestion of fish and drinking water are both significant pathways of exposure, application of an ARAR that is based only on drinking water ingestion (e.g., MCLs) may not be adequately protective.

If an ARAR is determined to be protective, it will be used to establish the acceptable exposure level. If not (presents a risk greater than 10), or doesn't exist for the specific chemical or pathway of concern, or multiple contaminants may be posing a cumulative risk, acceptable exposure levels will be identified through the risk assessment process. Reference to the SPHEM for additional details.

Subtask 5B - Develop General Response Actions

General response actions describing those actions that will satisfy the remedial action objectives will be developed. These may include treatment, excavation, containment, extraction, disposal, institutional actions, or a combination of these.

Subtask 5C - Identify Volumes or Areas of Media

In this subtask, an initial determination is made of areas or volumes of media to which general response actions might be applied. This will be done for each medium of interest at the State Disposal Landfill site.

Subtask 5D - Identify and Screen Remedial Technologies and Process Options

In this subtask, the universe of potentially applicable technology types and process options is reduced by evaluating the options with respect to technical implementability. "Technology types" refer to general categories of technologies, such as chemical treatment, thermal destruction, solidification, capping or dewatering. "Technology process options" refer to specific processes within each technology type. Several broad technology types may be identified for each general response action, and numerous technology process options may exist in each technology type. This screening is accomplished by using readily available information from the RI to screen out technologies and process options that cannot be effectively implemented.

Subtask 5E - Evaluate Process Options

In this subtask, the technology processes considered to be implementable are evaluated in greater detail before selecting one or two processes to represent each technology type. One, or in some cases, two, representative processes are selected, if possible, for each technology type to simplify the subsequent development and evaluation of alternatives without limiting flexibility during remedial design. Process options are evaluated using effectiveness, implementability, and cost criteria. These criteria are applied only to technologies and the general response actions they are intended to satisfy not to the site as a whole. Also, the evaluation will typically focus on the effectiveness factor. The evaluation of process options is illustrated in Figure 1.

Subtask 5F - Assemble Alternatives

Alternatives are assembled using a combination of general response actions and the process options chosen to represent the various technology types for each media or operable unit, for the site as a whole. Alternatives to be developed will include at least the following:

- a. Treatment alternatives for source control that eliminate or minimize need for long-term management (including monitoring).
- b. Alternatives involving treatment as a principal element to reduce the toxicity, mobility or volume of waste.
- c. An alternative that involves containment of waste with little or no treatment but provides protection of human health and the environment primarily by preventing exposure or reducing the mobility of the waste.
- A no action alternative.

TASK 6 - SCREENING OF ALTERNATIVES

This task will narrow the list of potential alternatives that will be evaluated in detail and is comprised of the following steps:

*The alcernatives are further refined as appropriate;

*they are evaluated on a general basis to determine their effectiveness, implementability, and cost;

*a decision is made, based on this evaluation, as to which alternatives should be retained for further analysis.

Subtask 6A - Alternatives Definition

In this subtask, alternatives will be further defined to form a basis for evaluating and comparing them prior to their screening. Sufficient quantitative information to allow differentiation among alternatives with respect to effectiveness, implementability, and cost is require. Parameters that require additional refinement include the extent or volume of contaminated material and the size of major technology and process options. The following information should be developed, as appropriate, or the various technology processes used in an alternative:

*size and configuration of onsite extraction and treatment systems or containment structures;

*time frame in which treatment, containment, or removal goals can be achieved;

*rates or flows of treatment;

*spatial requirements for constructing treatment or containment technologies or for staging construction materials or excavate soil or waste;

*distances for disposal technologies;

*required permits and imposed limitations.

Subtask 6B - Screening Evaluation

In this subtask, defined alternatives are evaluated against short- and long-term aspects of three broad criteria: effectiveness, implementability, and cost. These are described as follows:

*Effectiveness: Alternatives will be evaluated to determine whether they adequately protect human health and the environment; attain Federal and Michigan ARARs or other applicable criteria, advisories, or guidance; significantly and permanently reduce the toxicity, mobility, or volume of the hazardous constituents; are technically reliable; and are effective in other respects. The consideration of reliability will include the potential for failure and the need to replace the remedy.

*Implementability: Alternatives will be evaluated as to the technical feasibility and availability of the technologies that each alternative would employ; the technical and institutional ability to monitor, maintain, and replace technologies over time; and the administrative feasibility of implementing the alternative.

*Cost: The cost of construction and long-term costs to operate and maintain the alternative will be evaluated. This evaluation will be based on conceptual costing information and not a detailed cost analysis. At this stage of the FS, cost will be used as a factor when comparing alternatives that provide similar results, but will not be a consideration at the screening stage when comparing treatment and non-treatment alternatives.

Subtask 6C - Alternative Screening

In this subtask, alternatives with the most favorable composite evaluation of all factors are retained for further consideration during detailed analysis. Alternatives selected will preserve the range of treatment and containment technologies initially developed plus the no action alternative.

A <u>technical memorandum</u> will be prepared and submitted to the MDNR detailing the development and initial screening of remedial alternatives (Tasks #6 and #7). A meeting will also be scheduled between the PRP, the MDNR, and the EPA to discuss (1) the set of alternatives selected for detailed analysis, and (2) the need for treatability and supplemental remedial investigations and what form they would take.

Subtask 6D - Alternatives Array Document

To obtain ARARs from the MDNR, a detailed description of alternatives (including the extent of remediation, contaminant levels to be addressed, and method of treatment) will be prepared. This document will also include a brief site history and background, a site characterization that indicates the contaminants of concern, migration pathways, receptors, and other pertinent site information. A copy of this Alternative Array Document will be submitted to the MDNR along with the request for a notification of the standards. If needed, a meeting will be scheduled between the MDNR, EPA, and the PRP to discuss the Alternatives Array document and ARARs.

TASK 7 - TREATABILITY AND SUPPLEMENTAL REMEDIAL INVESTIGATIONS

Data requirements not already available through the RI that are specific to the remedial alternatives identified for detailed analysis in Task 9 will be identified. These additional data needs may involve the collection of site characterization data, supplemental remedial investigations, or treatability studies to better evaluate technology performance.

Subtask 7A - Determination of Data Requirements

Additional data needs can be identified by conducting a more exhaustive literature survey than was originally conducted when potential technologies were initially being identified. The objectives of a literature survey are as follow:

*Determine whether the performance of those technologies under consideration have been sufficiently documented on similar wastes considering the scale and the number of times the technologies have been used.

*Gather information on relative costs, applicability, removal efficiencies, C&M requirements, and implementability of the candidate technologies.

*Determine testing requirements for bench or pilot studies, if required.

Subtask 7B - Treatability Testing

Treatability testing performed during an RI/FS is used to adequately evaluate a specific technology, including evaluating performance, determining process sizing, and estimating costs in sufficient detail to support the remedy-selection process. It is not meant to be used solely to develop detailed design or operating parameters that are more appropriately developed during the remedial design phase. Bench-scale or pilot-scale techniques may be utilized, but in general, treatability studies will include the following steps:

*preparing a work plan (or modifying the existing work plan) for the bench or pilot studies;

*performing field sampling, and/or bench testing, and/or pilot testing;

*preparing a brief report documenting the results of the testing.

Chapter 6 of EPA's draft <u>Guidance for Conducting RI/FSs Under CERCLA</u> (March 1988) provides information regarding this Task.

A <u>technical</u> <u>memorandum</u> will be prepared and submitted to the MDNR detailing Task 8.

TASK 8 - REMEDIAL ALTERNATIVES EVALUATION

Section 121 (b)(1)(A-G) of CERCLA outlines general rules for cleanup actions, and establishes the SARA statutory preference for permanent remedies, and for treatment and/or resource recovery technologies that reduce toxicity, mobility

or volume of hazardous substances, pollutants and contaminants. Further, it directs that the long-term effectiveness of alternatives be specifically addressed and that at a minimum the following be considered in assessing alternatives:

- A. Long-term uncertainties associated with land disposal;
- B. Goals, objectives and requirements of the Solid Waste Disposal Act;
- C. Persistence, toxicity, mobility and propensity to bioaccumulate of hazardous substances and their constituents;
- D. Short and long-term potential for adverse health effects from human exposure;
- E. Long-term maintenance costs;
- F. Potential for future remedial actions costs if the alternative were to fail; and
- G. Potential threat to human health and the environment associated with excavation, transportation and redisposal, or containment.

The EPA has developed nine evaluation criteria. Consideration of the criteria is intended to satisfy the statutory requirements; i.e., points A through G above, and to enable the decision maker to compare alternatives and select a remedy which will:

- Be procective of human health and the environment,
- 2. Attain applicable or relevant and appropriate requirements (ARARs), or provide grounds for invoking a waiver,
- Be cost effective.
- 4. Use permanent solutions and alternative treatment technologies to the maximum extent practicable, and
- 5. Satisfy the preference for treatment that reduces toxicity, mobility or volume as a principle element (or provide an explanation for why it does not).

The Evaluation of Alternatives task is basically a three-stage process consisting of the following:

^{*}Detailed development of alternatives,

^{*}Detailed analysis of alternatives, and

^{*}Comparison of alternatives.

Subtask 8A - Detailed Development of Alternatives

Each alternative will be defined in sufficient detail to facilitate subsequent evaluation and comparison. Typically this activity may involve modification of alternatives based on ARARS, refinement of quantity estimates, technology changes, or site areas to be addressed. Prior to detailed definition, the final list of conceptual alternatives will be agreed upon by the MDNR and the EPA.

Subtask 88 - Detailed Analysis of Alternatives

Alternatives will be evaluated with respect to nine criteria. The nine criteria encompass:

*technical, cost and institutional considerations; *compliance with statutory and regulatory requirements; and *state and community acceptance.

Each criteria is discussed below:

*Short-term effectiveness: The assessment against this criterion examines the effectiveness of alternatives in protecting human health and the environment during the construction and implementation period until response objectives have been met.

*Long-term effectiveness and permanence: The assessment of alternatives against this criterion evaluates the long-term effectiveness of alternatives in protecting human health and the environment after response objectives have been met.

*Reduction of toxicity. mobility and volume: The assessment against this criterion evaluates the anticipated performance of the specific treatment technologies.

*Implementability: This assessment evaluates the technical and administrative feasibility of alternatives and the availability of required resources.

<u>*Cost:</u> This assessment evaluates the capital and 0&M costs of each alternative.

*Compliance with ARARs: This assessment against this criterion describes how the alternative complies with ARARs, or if a waiver is required, how it is justified.

*Overall protection of human health and the environment: The assessment against this criterion describes how the alternative as a whole achieves and will continue to protect human health and the environment.

*State acceptance: This assessment reflects the state's (or supporting agency's) apparent preference or concerns about alternatives.

*Community acceptance: This assessment reflects the community's apparent preferences or concerns about alternatives.

Subtask 8C - Comparison of Alternatives

After each alternative has been individually assessed against each of the nine criteria, a comparative analysis will be conducted. The purpose of this analysis is to compare the relative performance of each alternative with respect to each specific evaluation criterion. The narrative discussion will describe the strengths and weaknesses of the alternatives relative to one another with respect to each criterion, and how reasonable variations of key uncertainties could change the expectations of their relative performance. If innovative technologies are being considered, their potential advantages in cost or performance and the degree of uncertainty in their expected performance (as compared with more demonstrated technologies) will also be discussed. A summary table should be prepared highlighting the assessment of each alternative with respect to each of the nine criteria.

TASK 9 - FEASIBILITY STUDY REPORT

Technical Memoranda

The results of specific feasibility study activities will be submitted to the MDNR throughout the RI/FS process. These memoranda will be submitted in draft form for review and comment. Upon receipt of comments, a final form of these memoranda will be prepared and submitted. The specific technical memoranda and their associated schedule will be identified in the Work Plan, and will include:

*Development and initial screening of remedial alternatives;

*Alternatives Array Document.

Feasibility Study Report

A Feasibility Study report covering the activities performed and conclusions drawn from Tasks 4, 5, 7, 8, and 9 will be completed following the approval of the technical memoranda. A draft report will be submitted to MDNR for review and comment. A meeting will be scheduled to discuss MDNR and EPA comments, if any, prior to preparation of the final draft report by Waste Management of Michigan, Inc.'s selected consultant. The FS report will not be considered "draft final" until a letter of approval is issued by the MDNR PM. The approved draft final FS report will be placed by the MDNR in public repositories for public review and comment as per Community Relations Plan requirements. Technical memoranda prepared previously will be summarized and referenced in order to limit the size of the report. However, the report will completely document the FS.

Following the public comment period, should it be determined (by the MDNR) that, based on the public's comments, the RI/FS requires revision, the PRP will prepare and submit to MDNR and EPA such a revision, or, the MDNR may prepare the revision itself.

The suggested format for the Feasibility Study Report is given in Table 2.

Table 2. SUGGESTED FS REPORT FORMAT

Executive Summary

- 1. Introduction
 - 1.1 Purpose and Organization of Report
 - 1.2 Background Information (Summarized from RI Report)
 - 1.2.1 Site Description
 - 1.2.2 site History
 - 1.2.3 Nature and Extent of contamination
 - 1.2.4 Contaminant Face and Transport
 - 1.2.5 Baseline risk Assassment
- Identification and Screening of Tachnologies
 - 2.1 Introduction
 - 2.2 Remedial action Objectives presents the development of remedial action objectives for each medium of interest (i.e., ground water, soil, surface water, air, etc.). For each medium, the following should be discussed:
 - Contaminants of interest
 - Allowable exposure based on risk assessment
 - Allowable exposure based on ARARs
 - Development of remedial action objectives
- 3. Development and Screening of Alternatives
 - 3.1 Development of Alternatives Describes rationale for combination of technologies/media into alternatives. Note: this discussion may be by medium of for the site as a whole.
 - 3.2 Screening of Alternatives
 - 3.2.1 Introduction
 - 3.2.2 Alternative 1
 - Description
 - Evaluation
 - Effectiveness
 - Implementability
 - Cost
 - 3.2.3 Alternative 2
 - Description
 - Evaluation
 - 3.2.4 Alternative 3
 - 3.2.5 Summary of Screening

Table 2. (continued)

		Introduc	ysis of Alternatives tion				
	4.2	alternative Analysis					
		4.2.1	Alternative 1				
			4.2.1.1 Description				
			4.2.1.2 Assessment				
			- Short-term effectiveness				
			- Long-term effectiveness and permanence				
		1	 Reduction of mobility, toxicity, and volume 				
			- Implementability				
			- Cost				
			- Compliance with ARARs				
			- Overall protection				
		•	- State acceptance				
			- Community acceptance				
		4.2.2	Alternative 2				
			4.2.2.1 Description				
			4.2.2.2 Assessment				
			Alternative 3				
			Summary of Alternatives Analysis				
4	4.3	Comparison Among Alternatives					
		4.3.1	Short-term effectiveness				
		4.3.2	Long-term effectiveness and permanence				
		4.3.3	Reduction of mobility, toxicity, and volume				
		4.3.4	Implementability				
		4.3.5					
			Compliance with ARARs				
			Overall protection				
		4.3.8	State acceptance				
			Community acceptance				
		4.3.10	- '				
6	4.4	Summary	of Detailed Analysis				

Bibliography Appendices APPENDIX C

FINANCIAL ASSURANCE

NATIONAL GUARANTY INSURANCE COMPANY

7 BURLINGTON SQUARE, 6th FLOOR • BURLINGTON, VT 05401 • 1-800-876-6442

PERFORMANCE BOND

BOND	NO.	OR94-0501-OB
DOLLD	210	0113 . 0001 01

Know all men by these presents:

That S.C. Holdings, Inc., a subsidiary of WMX Technologies, Inc., as Principal, and National Guaranty Insurance Company, as Surety, are held and firmly bound unto the State of Michigan, Department of Natural Resources (MDNR), as Obligee, in the sum of -----Two Million and 00/100 Dollars------(\$2,000,000.00), for the payment of which sum, well and truly to be made, the Principal and Surety bind themselves, their heirs, executors, administrators, successors, and assigns, jointly and severally, firmly by these presents.

Whereas, the Principal has entered the Administrative Order by Consent for Response Activity, MDNR Docket No. AOC-ERD-1994-____(the "Order") with the Obligee for performance of a Remedial Investigation and Feasibility Study at the State Disposal Landfill Superfund Site, Kent County, Michigan, in accordance with the requirements of the Order. The Order is by reference made a part hereof.

Now, therefore, the condition of this obligation is such that, after Principal is issued a Certificate of Completion of RI/FS by the MDNR pursuant to the Order, then this obligation shall be null and void; otherwise it shall remain in full force and effect. The Surety hereby waives notice of any alteration or extension of time made by the Obligee.

This bond shall be in effect for one year, beginning on the effective date of the Order. This bond shall be automatically renewed on an annual basis unless, not less than 120 days prior to the current expiration date, Surety notifies both Principal and Obligee by certified mail of the decision not to extend the expiration date. The 120 day period shall begin on the date when both Principal and Obligee have received the notice, as evidenced by the return receipts.

If for any reason this bond is canceled, Principal must provide a new financial assurance mechanism pursuant to Paragraph 9.3 of the Order. In the event that an approved alternate financial assurance mechanism is not provided by SCH, Surety shall honor the bond.

Whenever Principal shall be declared in writing by the Obligee to have failed or refused to properly implement its responsibilities under the Order, Surety shall promptly:

- complete the Order in accordance with its terms and conditions,
 or:
- 2. disburse to the Obligee the amount set forth in the first paragraph hereof, less any amount paid by the Principal to the Obligee pursuant to Paragraph 25.3 of the Order. Obligee shall reimburse the Surety, within 120 days of the completion of the obligations of Principal under this Order, for any amount not expended by the Obligee in performing the obligations of the Principal under the Order.

Any suit under this bond must be instituted before the expiration of two (2) years from the date of receipt by Principal of the Certificate of Completion of the RI/FS issued by the MDNR pursuant to the Order.

Signed, sealed, dated this 2nd day of May , 1994.

S. C. HOLDINGS, INC.

Principal.

By:

Susan C. Nustra, Assistant Treasurer

NATIONAL GUARANTY INSURANCE COMPANY

Surety

Ву:

Leo // Winstead, Attorney-in-fact

POWER OF ATTORNEY

Know All Men By These Presents that the National Guaranty Insurance Company, 7 Burlington Square, 6th Floor, Burlington, Vermont Corporation (the "Corporation"), has constituted and appointed and does hereby constitute and appoint Janice Adams-Harris, Roberta A. Krenek, Alison M. Monaco and Leo J. Winstead of Oak Brook, Illinois each its true and lawful Attorney-in-fact to execute under such designation in its name and to affix its corporate seal to deliver for and on its behalf as surety thereon or otherwise, bonds of any of the following classes, to wit:

- 1. Surety bonds to the United States of America or any agency thereof, including lease and miscellaneous surety bonds required or permitted under the laws, ordinances or regulations of any State, City, Town, Village, Board or any other body or organization, public or private.
- 2. Bonds on behalf of contractors in connection with bids, proposals or contracts.

The foregoing powers granted by the Corporation shall be subject to and conditional upon the written direction of any officer (or any designee of any such officer) to execute and deliver any such bonds.

IN WITNESS WHEREOF, the Corporation has caused these presents to be signed by its Vice President/Treasurer and its Vice President/Secretary, and its corporate seal to be hereto affixed this 2nd day of May, 1994.

Witness:

Herbert A. Getz Vice President/Secretary

NATIONAL GUARANTY INSURANCE COMPANY

James E. Koenig

Vice President/Treasurer

APPENDIX D

DISPUTE RESOLUTION ESCROW

APPENDIX D

DISPUTE RESOLUTION ESCROW AGREEMENT

THIS AGREEMENT is entered into by and among

(Escrow Agent), the State of Michigan and its Michigan Department of Natural Resources ("MDNR") (together, "the State"), and SC Holdings, Inc., and Waste Management, Inc. (together "Waste Management"), in accordance with the Administrative Order by Consent for Response Activity, MDNR Docket Number AOC-ERD-[]-[] (the "Order"). This Agreement shall have the same effective date as the Order.

RECITALS

- A. The terms used in this Dispute Resolution escrow agreement are the same as those defined in the Order.
- B. The State and Waste Management entered into the Order to conduct a Remedial Investigation/Feasibility Study ("RI/FS") at the SCA Independent Landfill in Muskegon County, Michigan. The order provides for the placement into the Dispute Resolution Escrow that portion of a demand, applicable interest and stipulated penalties that are subject to a dispute resolution pursuant to Section XXIV of the Order.
- C. In accordance with the Order, the Escrow Agent shall pay the balance of the account, or any relevant portion thereof, to the MDNR and/or Waste Management in the manner provided in Section XXV, to the extent each party prevailed in the dispute resolution.

- D. Pending se of the Escrow Amount is accordance with the terms of the Agreement, the Parties agree to the investment of the Escrow Amount as set forth in Subsection 3.2 of this Agreement.
- E. The Escrow Agent shall invest and disburse the Escrow Amount on the terms and conditions provided below.
- F. The Escrow Amount is that portion of a demand, applicable interest and stipulated penalties that are subject to a good faith dispute.
- G. The Escrow amount is an escrow created at the financial institution named in Paragraph 1.1.
- H. the Authorized Person is the representative designated by Waste Management.

NOW, THEREFORE, in consideration of the premises herein, the Parties agree as follows:

I. DEPOSITS INTO ESCROW

1.1 Deposits into Escrow.

In accordance with Paragraph 24.3 of the Order, Waste Management shall deposit cash in the amount equal to the disput4ed concern into the Escrow Account by transferring such amount to the Escrow Agent as follows:

<pre>:row Agent:</pre>	**************************************
Address:	and the second of the second o
Account #:	440
Attention:	
ABA #:	
Facsimile:	
Telephone:	

1.2 Interest on Deposits.

— Interest earned by the deposit is the property of Waste Management.

II. TERMS OF RELEASE OF ESCROW

2.1 Disbursement of Escrow Account.

Amount shall be held and disbursed in the manner reasonably prescribed by the Escrow Agent, which shall at all times be consistent with the terms of this Agreement. All requests for disbursements shall be presented in writing to the Escrow Agent by the State or the Aurhorized person, and shall be accompanied by a copy of the MDNR's decision pursuant to Paragraph 24.1 of the Order. Within ten (10) days of receipt of a written request for disbursement, the Escrow Agent shall pay the balance of the account, or any relevant portion thereof, to the MDNR and/or to Waste Management, to the extent each party prevailed in dispute resolution as described in the MDNR's decision. Unless otherwise

requested, payment the State shall be remit! by check made payable to the "State of Michigan", and shall be sent by first-class mail to the following address:

Assistant Attorney General in Charge Environmental Protection Division 6th Floor, Law Building 525 West Ottawa P.O. Box 30212

The Facility name and MDNR docket number shall be identified on each check. A copy of the transmittal letter and the check shall be provided simultaneously to the MDNR Project Coordinator.

(b) If, after completion of a dispute resoluiton pursuant to Section XXIV of the Order, any disagreement or dispute shall remain between the Authorized Person and any other person regarding the Escrow Amount, and whether or not litigation has been instituted in this regard, the Escrow Agent shall refuse to comply with any claim or demand and shall continue to hold the Escrow Amount until the Escrow Agent has received (1) a written agreement executed by each of the Partiees directing the disbursement of the Escrow Amount; or (2) a finan non-appealable order by a court of competent jurisdiction and entered pursuant to any action, suit or proceeding in which Waste Management and/or the Authorized Person is a party. Any court order shall be accompanied by a legal opinion by counsel for the presenting party satisfactory to the Escrow Agent to the effect that said

court order is fine and non-appealable. the L row Agent shall act on such court order and legal opinions without further question.

2.2 Termination of Escrow.

Upon receipt vy the Escrow Agent of written notice from the MDNR that the response activity required by the Order has been completed to the MDNR's satisfaction, the Escrow Agenty shall terminate this Escrow and pay Waste Management the balance, if any, of the Escrow Amount.

III. MANAGEMENT AND INVESTMENT OF ESCROW DEPOSIT

3.1 Preservation of Income and Principal.

Subject to Subsections 3.2 and 4.5, and at the direction of the Authorized person, the Escrow Agent shall at all times hold, manage and invest the assets of the Escrow Amount in a manner designed to preserve the principal of the Escrow Amount for the purpose of the Dispute Resolution Escrow.

.3.2 Investment of Escrow Deposit.

The Escrow Agent shall invest and reinvest all or any part of the Escrow Amount, including any earnings, exclusively in the investments listed: in United States direct obligations, obligations guaranteed by the United States or agencies of the United States, common trust funds or mutual funds which invest solely in United States direct or guaranteed obligations, bank

certificates of de, ;it to the extent they are _nsured by the federal government, and common trust funds or money market funds investing in short term insured or at least "A" rated municipal bonds. In all cases, however, the total investments must be sufficiently liquid to enable the escrow Agent to fulfill the purpose of the Escrow and to satisfy obligations when submitted by the Authorized Person or the State.

IV. POWERS, DUTIES AND OBLIGATIONS OF THE ESCROW AGENT

4.1 Duties Defined by Agreement.

This Agreement expressly sets forth all the duties of the Escrow Agent with respect to any and all matters pertinent hereto. No implied duties or obligations shall be read into this Agreement against the Escrow Agent. The Escrow Agent shall not be bound by the provisions of any agreement among the other Parties hereto except this Agreement.

4.2 Authority of Escrow Agent.

The Escrow Agent shall have the authority to make, execute, acknowledge and deliver any an all documents of transfer and conveyance and any an all instruments that may be necessary or appropriate to carry out the powers herein described.

4.3 Designation of Investments.

the Escrow Agent may register or hold any security in bearer form or in book entry, or to deposit or arrange for the deposit of such securities in a qualified central depository even though, when so deposited, such securities may be merged and held in bulk in name of the nominee of such depository with other securities deposited therein by another person, or to deposit or arrange for the deposit of any securities issued by the United States Government, or any agency or instrumentally thereof, with a Federal Reserve Bank, but the books and records of the Escrow Agent will at all times show that all such securities are part of this Dispute Resolution Escrow.

4.4 Annual Valuation.

The escrow Agent shall keep all record of this Dispute Resolution Escrow on a calendar year basis. The Escrow Agent shall make an annual accounting to the Parties designated in Section VI within ninety (90) days after the close of each calendar year or portion thereof during which this Dispute Resolution Escrow is effective. Monthly trust statements from the Financial institution shall be sent to the Environmental Response Division, Cost Recovery Unit.

4.5 Stand d of Care.

In investing, reinvesting, exchanging, selling and managing the Escrow, the Escrow Agent will discharge its duties with respect to the Escrow solely in the interest of the Parties, and with the care, skill, prudence, and diligence under the circumstances then prevailing which persons of prudence, acting in a like capacity and familiar with such matter, would use in the conduct of an enterprise of a like character and with like aims.

4.6 Liability.

the escrow Agent shall not be liable for any acts, omissions or defaults of any agent or depository appointed or selected with reasonable care. The Escrow Agent shall be liable only for its own acts or omissions occasioned by its willful misconduct, bad faith or negligence.

4.7 Discretion in Exercise of Powers.

The Escrow Agent shall be entitled to rely upon any order, judgment, certification, demand, notice, instrument or other writing delivered to it hereunder without being required to determine the authenticity or the correctness of any fact stated therein or the propriety or validity of the service thereof. The Escro Agent may act in reliance upon any instrument or signature reasonably believed by it to be genuine.

4.8 Advi of Counsel.

The Escrow Agent may consult with council from time to time with respect to any question arising as to the construction of this Agreement or any action to be taken hereunder. The Escrow Agent shall be fully protected, to the extent permitted by law, in acting upon the advice of counsel. The fees of the Escrow Agent's counsel shall be paid by Waste Management.

4.9 Independent Escrow Agent.

The Escrow Agent does not have any interest in the Escrow Amount, but is serving as escrow holder only and having only possession thereof. This Subsection and Subsection 4.6 shall survive notwithstanding termination of this Agreement or the resignation of the Escrow Agent.

4.10 Resignation or Removal of Escrow Agent.

The Escrow Agent may be removed by a joint written notice of removal signed by the State and Waste Management and delivered to the Escrow Agent. The Escrow Agent may at any time resign as the escrowee hereunder by giving thirty (30) days prior written notice to each of the Parties hereto. Such removal or resignation shall take effect at the end of the thirty (30) days following delivery of the notice of removal or resignation as the case may be, or when a successor escrow holder has been appointed by the Parties, and has assumed the responsibilities of the Escrow Agent hereunder, whichever is earlier.

4.11 Disp as Re: Action of Escrow A nt.

In the event that the Escrow Agent in good faith is in doubt as to what action it should take hereunder, the Escrow Agent shall be entitled to retain the Escrow Amount until the Escrow Agent shall have received (a) a final non-appealable order of a court of competent jurisdiction directing the delivery of the Escrow Amount; or (b) a written agreement executed by each of the Parties hereto directing delivery of the Escrow Amount. Any court order referred to in (a) above shall be accompanied by a legal opinion by counsel for the presenting party satisfactory to the Escrow Agent to the effect that said court order is final and non-appealable. The Escrow Agent shall act on such court order and legal opinions without further question.

4.12 Payment of Escrow Agent.

Fees for the services to be rendered by the Escrow Agent hereunder shall be paid to the Escrow Agent by Waste Management. The Escrow Agent shall be reimbursed by Waste Management for all reasonable expenses and disbursements incurred or made by the Escrow Agent in performance of its duties.

V. SUCCESSORS, GOVERNING JURISDICTION ANL MODIFICATION

5.1 Successors and Assigns.

This Agreement shall be binding upon and inure solely to the benefit of the Parties and their respective successors and assigns, heirs, administrators and representatives and shall not be enforceable by or inure to the benefit of any third party. No party may assign any of its rights or obligations under this Agreement without the written consent of the other Parties.

5.2 Governing Jurisdiction.

This Agreement shall be construed in accordance with and governed by the laws of the State of Michigan.

5.3 Modification.

This Agreement may only be modified by written agreement signed by all of the Parties hereto, and no waiver hereunder shall be effective unless in writing and signed by the affected Parties.

VI. NOTICES

All notices, deliveries or other communications required or permitted hereunder shall be in writing and shall be deemed given when sent by facsimile transmission and confirmed by certified or registered mail addressed as follows:

(a)	as	to	the	Escrow	Agent:	

(b) as to the MDNR:

Ms. Lisa Summerfield Superfund Section ERD P.O. Box 30426 Lansing, MI 48909

David Koski Cost Recovery Unit P.O. Box 30426 Lansing, MI 48909 Facsimile: 517 335-43887 Facsimile: 517 373-2637

(c) as to Waste Management: or to such other address as the person to whom notice is given may have previously furnished to the others in writing in the manner set forth above. Communications shall be deemed to have been delivered on the day of delivery if delivered personally, two days after mailing if sent by mail, and one business day after delivery to an overnight courier, if sent by overnight courier; provided that notice of any change of address shall be effective only upon receipt thereof.

VII. EXECUTION

Execution of this Agreement by the Escrow Agent will constitute its acceptance of the terms hereof.

VIII. COUNTERPARTS

This Agreement may be executed in two or more counterparts, each of which shall be deemed an original, and all of-which, when taken together, shall constitute one and the same instrument.

IX. DISSOLUTION

In the event that Waste Management dissolves or otherwise ceases to conduct response activities at the Facility, all of its rights in the Dispute Resolution Escrow shall vest in the State alone. Upon termination of the Dispute Resolution Escrow in accordance with Subsection 2.2 any unexpended portion of the Escrow Amount shall be disbursed to Waste Management.

X. APPLICABLE LAW

IN WITNESS WHEREOF, each	of the Parties has caused thi
Agreement to be executed on its b	ehalf by its officers thereunt
duly authorized.	•
•	
Escrow Agent	Date
Roland Harmes, Director, Michigan Department of Natural Resources	Date
SC Holdings, Inc.	Date
Waste Management, Inc.	Date